ED242975

IMPLICATIONS OF RESEARCH FOR NURSING PRACTICE, EDUCATION, AND POLICYMAKING

Proceedings of the Second Annual SCCEN Research Conference

December 3-4, 1982
Birmingham, Alabama

Edited by Mary Colette Smith

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M A Sullivan

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE038838

Southern Council on Collegiate Education for Nursing
and
The University of Alabama in Birmingham
School of Nursing

1340 Spring Street, N.W.
Atlanta, Georgia 30309
1983
$5.00

TABLE OF CONTENTS

Page

FOREWORD ix

IMPLICATIONS OF RESEARCH FOR NURSING PRACTICE, EDUCATION, AND POLICYMAKING 1
-Patricia Jones

DEVELOPING AND APPLYING POLICY-ORIENTED RESEARCH FOR NURSING PRACTICE AND EDUCATION 17
-Ora L. Strickland

THE PROCESS, PERILS, AND JOYS OF COLLABORATIVE RESEARCH 21
-Jeanette Lancaster

Abstracts of Studies

A DESCRIPTION OF NEGOTIATION BEHAVIORS IN NURSE-PATIENT VERBAL ENCOUNTERS IN HOSPITALS 23
-Jan Biasini

CHILDHOOD SOCIALIZATION FOR VIGOROUS EXERCISE HABITS 25
-Kathleen C. Brown

AN ECONOMETRIC MODEL--PREDICTIVE FACTORS OF SUPPLY AND SALARIES OF NURSE PRACTITIONERS 28
-Joan Farrell Brownie

MILK YIELD ASSESSMENT IN ASSISTING MOTHERS DURING THE INITIATION OF LACTATION 31
-Ellen B. Buckner

CULTURAL DETERMINANTS OF HEALTH AND SELF-CARE IN URBAN AMERICA 34
-Jacqueline Clinton

A COMPARISON OF ATTITUDES, WORKING CONDITIONS, AND NURSING PRACTICE OF FOREIGN NURSE GRADUATES AND U.S. NURSE GRADUATES IN FLORIDA 36
-Marie E. Cowart

COMPARISON OF JOB SATISFACTION BETWEEN NURSES PRACTICING IN PRIMARY AND TEAM NURSING SETTINGS 39
-Jimmie G. Davis

BACCALAUREATE GRADUATES' SUCCESS ON STATE BOARDS: A PREDICTION STUDY 41
-Mary E. Duffy, Mary A. Lubno, Grace A. Willard

INVESTING IN NURSING: DEVELOPMENT OF AN INTENSITY-OF-NEED RESOURCE ALLOCATION TECHNIQUE 46
-Denise E. Edwards-Weiss, Steve A. Freedman, Patricia M. Pierce

THE OCCURRENCE AND TREATMENT OF AUDITORY HALLUCINATION 48
-William E. Field, Jr.

THE DRUCILLA MANTLE STUDY OF THE CURRICULUM IMPLICATIONS OF INTENDED WORK-RELATED BEHAVIORS AMONG NURSE ADMINISTRATORS IN SOUTHEASTERN UNITED STATES HOSPITALS 50
-Beverly M. Henry

A QUANTITATIVE DETERMINATION OF PROGRAM IMPACT ON REGISTERED NURSE STUDENTS 53
-Samuel T. Hughes, Dorothy J.Turpin, John C. Reed

COLLABORATION: A BASIS FOR POLICYMAKING 56
-Kathleen Mikan and Kathryn Barchard

PROFESSIONAL DEVELOPMENT AND CONTINUED LEARNING 58
-Virginia Layng Millonig

DEPRESSION AS AN EXPLANATION FOR DECREASED SUBJECTIVE TIME IN THE ELDERLY 61
-Margaret A. Newman and Judith K Gaudiano

HEALTH STATUS OF CHILDREN IN RURAL AREAS OF THE DOMINICAN REPUBLIC: POLICY IMPLICATIONS FOR NURSING PRACTICE AND NURSING EDUCATION IN THIRD WORLD COUNTRIES 65
-Francine E. Nichols

DOES CONTINUING EDUCATION IMPROVE NURSES' CLINICAL BEHAVIOR? 68
-Sandra K. Oliver

ACADEMIC CREDENTIALS ACCEPTED FOR TEACHING IN BACCALAUREATE SCHOOLS OF NURSING, MPH and MSN 71
-William Larry O'Neal, Cheryl M. Porter, Edna G. Treuting

THE EFFECT OF A CITIZENS' NURSING TASK FORCE GROUP ON NURSING PRACTICE AND COMMUNITY PLANNING FOR HEALTH CARE 74
-JoAnn H. Patray

THE UTILIZATION OF DERMATOGLYPHICS IN THE ASSESSMENT OF LEARNING DISABILITIES AND HYPERACTIVITY 76
-Patricia A. Payne

DISCOVERY OF NURSING GESTALT IN CRITICAL CARE NURSING: THE IMPORTANCE OF THE GRAY GORILLA SYNDROME 79
-Sue Holland Pyles

EFFECTS OF INTERMITTENT MANDATORY STIMULATION ON APNEA AND $TcPO_2$ IN PREMATURE INFANTS 81
-Patricia Boudolf Rausch, Jeffrey M. Majewski, Gene Cranston Anderson

A VALIDATION STUDY OF CORE ITEMS FOR A GRADUATE MATERNAL-INFANT NURSING CURRICULUM 83
-Rene Reeb

SECONDARY ANALYSIS OF DATA ON NURSES' ETHICAL JUDGMENTS MEASURED BY TYPE OF BASIC EDUCATION AND CLINICAL UNIT 85
-Barbara J. Reid and Janet M. Burge

THE RELATIONSHIP BETWEEN SELECTED ENVIRONMENTAL VARIABLES AND THE GROWTH OR DECLINE OF BACCALAUREATE, ASSOCIATE DEGREE,DIPLOMA, MASTER'S AND DOCTORAL PROGRAMS IN NURSING BETWEEN 1960 and 1978 88
-Mary Ann Rose

RELATIONSHIP OF LIFE STRESS TO DYSFUNCTIONAL UTERINE BLEEDING IN WOMEN OF CHILDBEARING AGE 91
-Ann M. Rosenow and James Geyer

THE ROLE OF FACULTY PRACTICE IN NURSING ACADEMIA 93
-Deidra Henley Sanders, Kathleen Bellinger, Jacqueline Reid

THE RELATIONSHIP BETWEEN SELF-CONCEPT AND SOCIAL ACTIVITY OF LEUKEMIC AND HEALTHY SCHOOL-AGE CHILDREN 95
-Joanne B. Scungio

BACCALAUREATE NURSING PROGRAM EVALUATION BY ALUMNI AND ALUMNI EVALUATION BY THEIR EMPLOYERS UTILIZING SURVEY QUESTIONNAIRES: POLICY IMPLICATIONS 98
-Virginia R. Strozier, Lois M. Knowles, Jennet M. Wilson, Tanya L. Bobo, Diane B. Greene

DIABETIC COMPLIANCE BEHAVIORS AND THEIR RELATIONSHIP TO SELECTED VARIABLES 101
-Ann E. Smith

THE IDENTIFICATION OF SELECTED STUDENT FACTORS, PRIOR TO ADMISSION INTO THE NURSING SEQUENCE, IN SUCCESSFUL COMPLETION OF A BACCALAUREATE NURSING PROGRAM 103
-Patricia E. Thompson

PERCEIVED COMPETENCY BEHAVIORS FOR THE CLINICAL NURSE SPECIALIST ROLE 105
-Mary Ellen Wyers, Susan K. Grove, Nancy L. Ackley

FOREWORD

The second annual research conference of the Southern Council on Collegiate Education for Nursing (SCCEN) aimed to promote nursing research as a basis for policymaking in nursing practice, education, and health care services. Keynoter Patricia Jones described issues in health care financing in the 80s and urged researchers to provide the kind of data and guidelines needed to support professional nursing services. Other speakers included Ora L. Strickland, who exhorted nurse researchers to affect policy by identifying critical areas that need study and initiating research studies dealing with questions surrounding these critical issues. Jeanette Lancaster noted that the most important public policy issue facing the profession of nursing is the establishment of an acceptable and stable economic base for the provision of nursing services, and gave pointers on collaborative research as one approach to contributing to the knowledge base.

Researchers reported on 32 studies, with almost equal numbers focusing on clinical practice, education, and the delivery of health care services; the majority have implications in all three areas. As a whole, they underscored the interrelatedness of research, education, and service.

The conference, co-sponsored by the School of Nursing, University of Alabama in Birmingham, was held December 3-4, 1982, in Birmingham. Members of the Research Committee, SCCEN, who plan the conferences are: William E. Field, Jr., University of Texas at Austin; Mary Colette Smith, University of Alabama in Birmingham; Margaret T. Beard, Texas Woman's University; and Ora L. Strickland, University of Maryland, Baltimore.

Audrey F. Spector
Executive Director
Southern Council on Collegiate
Education for Nursing

IMPLICATIONS OF RESEARCH FOR NURSING PRACTICE, EDUCATION, AND POLICYMAKING

Patricia Jones, RN, MSN
Director of the Washington Office
Deputy Executive Director
Division of Legislative & Government Affairs
American Nurses' Association

I have deliberately chosen to continue the introductory theme of this conference: "Health Care Financing in the 1980s."

The most important public policy issue confronting the profession of nursing is the establishment of an acceptable and stable economic base for the provision of nursing services. Quality of care, issues of nursing education, entry level, standards of practice, and nursing research cannot and will not be addressed until the profession has firmly established with the public that professional nursing services are needed, valuable, and, thus, have a specific monetary value.

Similarly these issues are all economically based:

- Quality of care—at what cost to the patient and/or taxpayer?
- What are the cost-effective contributions or implications of nursing research?
- How do we educate economically?

If nursing services are not valued, then the need for standards of practice is superfluous.

Cost containment legislation failed during the previous Administration, and the "voluntary effort" by hospitals was put in place only to fail also in terms of holding down inflation in health care costs. At the root of excessive costs is the provider reimbursement system.

It is widely recognized that the current retrospective method of reimbursing health care providers is a prime contributor to rapidly escalating health care costs. The cost pass-through provisions of the retrospective reimbursement system do not, in the opinion of many experts, provide any incentive for health care providers to offer their services at the lowest possible cost. Consequently, provider costs--and prices of services--continue to increase despite an overall lessening of inflationary pressures in the general economy.

As a result of rising health care costs, considerable support has evolved for changing the reimbursement system from a retrospective to a prospective method as a means of forcing health care providers to become more cost conscious. There have been proposed, and in some cases adopted at the state level, many different variations of rate control systems; virtually all of them utilize the prospective method of reimbursement as their centerpiece. The concept is simple: the rate (price) of reimbursement for health care services is predetermined, and providers are obligated to offer their services at the given rate. Cost consciousness is developed because those providers who cannot keep their operating costs (including "profit") below the reimbursement rate are punished economically. Furthermore, prospective reimbursement inserts a level of predictability in the costing out of health care services, which is beneficial to payers as well as providers.

In an effort to control federal Medicare spending, Congress added several reimbursement-related provisions to the recently enacted Tax Equity and Fiscal Responsibility Act (TEFRA). Although those provisions pertain to Medicare reimbursements, because of the magnitude of federal expenditures in this area, they are bound to have a ripple effect which can significantly alter the manner in which health care services are delivered and providers are reimbursed.

While TEFRA contains many reimbursement-related provisions, four provisions are particularly significant.

Two provisions establish reimbursement limits for a three-year period of time for hospitals and skilled nursing facilities. Another provision mandates the establishment of a prospective reimbursement system which will apply to hospitals, skilled nursing facilities, and other non-institutional providers. A fourth provision provides incentives for state legislatures to enact comprehensive, state-administered, rate control systems.

Section 223 Reimbursement Limits

The current Section 223 Medicare limitations have been expanded by TEFRA to include ancillary costs, applied on a cost-per-case basis (as opposed to the current routine per-diem basis), and adjusted for case mix. This provision will be implemented in the following manner: hospitals will be grouped according to similar characteristics and, based upon historical cost data, the group's average cost-per-case will be computed for a base year. The case year cost-per-case will then be adjusted for inflation and area wage differentials in a manner similar to those that are currently being utilized. Once the adjusted cost-per-case is determined for the hospitals in the group, a reimbursement cap of 120 percent of the group average will be established for each hospital's fiscal year commencing on or after October 1, 1982. The group reimbursement cap will then be reduced to 115 percent and 110 percent in each of the following years. Although this, and other, reimbursement provisions apply to hospitals over 50 beds, there are some circumstances in which "appropriate exemptions, exceptions, and adjustments" may be made.

Target Rate of Increase in Reimbursement Rate

Although all hospitals are covered by the Section 223 reimbursement limits, TEFRA also establishes a "target" rate of increase in the reimbursement rate for individual hospitals. The target serves as an incentive for hospitals to hold their per-case-costs in line with acceptable increases in the reimbursement rate. For example, an individual hospital's cost-per-case will be computed and adjusted by the percentage increase in the Health Care Financing Administration's (HCFA) "hospital market basket," which is estimated to be 7.9 percent. This will then be increased by one percent. A hospital's "target" fiscal year 1982 thus will be 108.9 percent of its current cost-per-case.[1] Furthermore, if a hospital can keep its per-case-costs below this target, the hospital will receive 50 percent of the savings (and HCFA will save the other 50 percent). If a hospital's costs exceed the target in the next two fiscal years, it will be reimbursed only 25 percent of its costs above the target. In the third year the hospital would have to absorb all of the cost overages.

State Rate Control Incentive

TEFRA contains a provision which would exempt all of the hospitals in the state from Medicare reimbursement requirements if the state would enact a comprehensive rate control system. To receive the Medicare reimbursement waiver, the state rate control system must apply to at least 75 percent of all the state's hospital inpatient revenues and it must apply to "substantially" all non-federal hospitals. Additionally, the state system must both provide equitable treatment for payers, hospital employees and patients, and the state must demonstrate that the reimbursement system would result in a net Medicare saving over a three-year period of time.

---

[1] If the hospital's actual cost is lower than its target amount, its reimbursement for inpatient operating costs will be whichever of the following is least: the inpatient operating cost-per-case plus 50 percent of the difference between that amount and the applicable target amount; the inpatient operating cost-per-case plus 5 percent of the target amount; or, the hospital's allowable cost-per-case under the case mix adjusted limits (yet to be determined). Federal Register, Vol. 47, No. 190, September 30, 1982.

Prospective Medicare Reimbursement

The Act mandates that the Secretary of Health and Human Services, specifically, the Health Care Financing Administration (HCFA), in conjunction with Congressional committees, prepare for introducing a prospective reimbursement system for Medicare reimbursements to both hospitals and skilled nursing facilities and other non-institutional providers.

Political Aspects

The concept of retrospective payment has been politically popular with both Republicans and Democrats and has been included in all major competition-based legislation. In the early days of Medicare, prospective payment was rejected in order to gain support of the hospital industry and the American Medical Association. The American Nurses' Association was the only group that supported Medicare in its early legislative days. When Medicare finally passed, nursing was left waiting at the altar while the groom walked off with the AMA and American Hospital Association. Both groups, AMA and AHA, are still ambivalent in their approach to prospective payment, with physicians arguing it will interfere with the physician's right to admit patients and the hospitals arguing (correctly so) that the system of prospective payment passed under TEFRA only focuses on the one cost component--the hospital.

The Reagan Administration views prospective payment as one of many ways, long-range in nature, of whittling down the size of Medicare. Therefore, it does not assign any great significance to prospective payment as such, and prefers to push for immediate cost savings by increasing copayments and deductibles, instituting a voucher system, or establishing a means test--all of which increase the burden to the elderly and disabled.

HCFA is preparing the specifications for prospective payment and has adopted, in part, the system utilized by the New Jersey State Rate Setting Commission, in particular, the method for classifying costs-per-case known as Diagnostic Related Groupings (DRGs).

HCFA at this time appears inflexible in what it will be proposing to Congress. Congress, on the other hand, is concerned that the prospective system proposed by HCFA may contribute to a decrease in quality patient care. Once again, this concern is bipartisan on the House side and that probably will be echoed on the Senate side.

Where does this leave nursing? Last spring the House Energy and Commerce Subcommittee on Health held hearings on the voluntary effort, i.e., cost containment. The voluntary effort had not worked, and hospital costs had continued to soar. During the hearings, AHA and the Federation of American Hospitals both alluded to a major source of high costs: nursing services and other labor-related costs.

Historically, the American Nurses' Association has consistently supported efforts by the federal government and other third-party payers to curb the rapid escalation of costs that have plagued the economy in general and the health care industry specifically. In the past, ANA has supported those cost containment measures that protect the consumer's access to quality health care and services in a timely fashion, and that protect the public health care facilities--which provide the majority of care to the most vulnerable populations, the aged and the poor--from undue financial hardship. Additionally, ANA has supported those cost containment measures that include a rational plan to maintain sufficient full-time-equivalent professional employees with appropriate compensation, so that quality of care and services can be assured.

More than 60 percent of employed registered nurses work in the nation's hospitals. Except where waivered, services of a registered nurse are available to patients and families 24 hours a day, 7 days a week, 52 weeks a year. The availability of nursing services in a hospital is the major reason why patients are admitted. If the patient did not need support and assistance with activities of daily living, if the patient and family did not require instruction and counseling with respect to self-care management, if the patient did not need frequent monitoring of vital signs and life processes, if the patient did not need professional intervention to alleviate pain, to cope with loss or disfigurement, to adjust to the impact of emotional or physical crises, then the patient would not need to be admitted to the hospital. Treatment of the patient's medical problem could occur in the physician's office, in a health maintenance facility, in the patient's home, or in one of a variety of other community-based facilities. Therefore, any future system of Medicare reimbursement to hospitals for care and services must include recognition of the need for and the cost of the services of professional nurses. Most of you are aware, I am sure, that the present Medicare reimbursement system included nursing services along with bed, board, and maintenance costs under the general rubric of routine operating costs. This accounting system places nursing services in a highly vulnerable position and makes them a prime target for the budget-cutting ax.

As new measures to contain costs are planned, ANA remains concerned about the complement of and compensation for professional nurses in the nation's hospitals. In the past, the wages and benefits paid to health care workers have been the target of efforts to control health care costs. With the implementation of the Medicare caps and certain state rate-setting programs, we are beginning to see this happening again and, indeed, have received reports of nurse lay-offs and overnight disappearance of nurse shortages. Therefore, we feel strongly that any payment mechanism must provide safeguards against this ill-advised method of cost containment. Not only does it place a misguided and unfair burden on health care employees, but it has severe adverse consequences for the quality of care. Any payment mechanism to control health care costs must encompass standards to ensure that there is no disincentive for health care employers to provide decent wages and benefits to employees.

We are certain that without such safeguards, health care cost reductions will become the burden of health care employees. We have all heard representatives of the health care industry citing the increases in the earnings of health care workers as a major contributing factor to rising health care costs. The figures, which have been receiving a disproportionate amount of attention, tell only part of the story. Health care workers are among the lowest paid workers in any industry. Even though their wages have been increasing at a faster rate than has been the case in some industries, they only earn 88 percent of the average of all wage and salary workers. Blaming spiraling health care costs on workers whose wages average $6.49 an hour this year and $5.84 per hour last year is absurd.

Concurrently, during cost-containment attempts, hospitals have decreased the number of nurse administrative positions, eliminated staff development and on-the-job training programs, and have done away with support services, such as transportation and messenger services, and ward clerks. These support services have been essential in decreasing the non-cost-effective, non-nursing tasks performed by professional nurses.

In a milieu of limited support, professional nurses are then required to perform a wide variety of tasks normally performed by unlicensed workers. Some hospitals have attempted the reverse, that is, the numbers of professional staff are reduced and the numbers of support or unlicensed workers are increased. These unlicensed, and sometimes undereducated, individuals are then required to assume responsibilities normally performed by licensed professionals. In either case, the hospital requires patients to sustain a position of extreme jeopardy with respect to receiving quality, necessary, and timely care and services.

The elimination or diminution of on-the-job-training or staff development programs places the patient in further jeopardy, as undereducated individuals are called upon to provide care and services for which they do not have sufficient background or experience. Furthermore, as new technologies or procedures are added to the patient's treatment schedule, the patient is placed in the position of receiving substandard and potentially hazardous care.

Protection from the potentially adverse impact of cost containment measures on the quality of care and services provided to patients in hospitals and on the employment and compensation of all professional providers, including nurses, is essential. If the patterns of cost containment measures that were implemented in the early 70s with wage and price controls were reinstituted, a nurse exodus from the nation's hospitals can be predicted, as the hospital will become a particularly unattractive place for employment of nurses. If nurses leave the hospital this time, they may not return in the future.

Some of you may say "Good. What have hospitals ever done for nursing except co-opt the profession?" But I submit that this is not a decision the profession can make. Nor is it one that the hospitals can make. It is truly a public decision to determine whether professional nursing services are needed in hospitals.

Prospective payment for care and services to be provided through a hospital has many appealing features. Basic to this payment mechanism, however, is the predetermination of how much money each facility will receive. The Diagnostic Related Groupings (DRGs) have been proposed as the main feature for determining payment to hospitals under the currently proposed cost containment measures. Diagnostic Related Groupings are not a panacea, and are highly problematic when this is the sole categorization for determination of payment.

First, when the total number of DRGs is small, the patients will be unlikely to know the true costs of health care services received, since the patients will not know where, within the grouping, their actual diagnosis falls. Cost containment measures that do not provide sufficient information about costs to the consumer will not promote more effective and efficient delivery of care and services. Furthermore, a DRG that includes a wide range of diagnoses, with varying lengths of stay, may promote extended stays for some patients or too early a discharge for others.

Second, the DRG mechanism does not adequately reflect the intensity and variety of necessary support and assistance required by a particular patient and family or by the grouping. The need for support and assistance from nursing personnel is an individual determination that is influenced by a variety of factors, including the patient's level of knowledge about the diagnosis and the impact on his or her lifestyle and future capabilities, the capacity of the patient and family to participate in the care-giving process, the presence of disabling conditions associated with the aging process, prior incidences of disease debilitation or trauma, and the cultural background of the patient/family. Even in some states where measurements of the relative intensity of services have been attempted, the result has been a retrospective determination of the costs of services provided but not of the care and services needed by the patient or the grouping.

Third, use of the DRG inappropriately assumes that medicine and nursing have established proven methods of treatment for all medical diagnoses and combinations of diagnoses. The DRG mechanism is insensitive to the amount of time that may be needed to determine the proper treatment approach for an individual when physiological imbalance is complex, severe, and unstable. To relegate these individuals to the "outlier" group is to be blinded to the true costs of care. As length of stay in the hospital decreases and as more medical and surgical treatments are performed outside the hospital, the numbers of patients who can be described as having complex, severe, and unstable conditions in the hospital will increase. The "outlier" group may become more the norm than the exception in future years, and a prospective payment mechanism must be able to accommodate this change.

Fourth, the DRG schema assumes that emergency treatment and elective treatment require equal amounts of resources; with respect to the use of nursing services, the patient and family need for support and assistance varies widely with this variable. Additionally, the DRG approach assumes that individuals within any grouping with the same diagnosis present themselves for treatment under the same conditions. Whether the treatment that is required is elective will influence the condition of the patient. But, other factors, such as the patient's nutritional status and hydration level, are important determiners of response to treatment as well as the use of resources.

Fifth, because of the use of the number of procedures in calculating payments, the DRG mechanism favors surgical treatment over nonsurgical treatment of a condition. Such a bias in payment will do nothing to curtail the number of surgical procedures performed, and will do less to encourage research and continued clinical exploration for nonsurgical solutions to health problems. I do not wish to suggest that all surgery is unnecessary, but rather wish to stress that surgical intervention is but one of a variety of modes of treatment for many conditions. To encourage surgical interventions through a payment mechanism is unwise.

Finally, the DRG mechanism, in and of itself, does not provide the essential requirements to prevent skimming, dumping, and manipulation of admissions or services. It is assumed that a particular hospital may be able to provide the needed care and services for a particular diagnostic grouping more cost effectively; however, to make the determination that the hospital is not dumping patients who consume a greater amount of resources will be difficult under this system and logic. Transfer of such patients to other facilities will place an unfair burden on the receiving hospital, which is more likely to be a public facility or a community nonprofit hospital.

In summary, the DRG mechanism does little to recognize the reality of care and services provided by professional nurses to hospitalized patients, or to recognize the varying needs and conditions of the patients. Although the DRG mechanism may appear as a manageable, logical approach for payment, the problems cited earlier will diminish any savings or cost control. I believe other classification schema must be developed for determining the payment to hospitals for care and services rendered, which include the patient's and family's need for support and assistance, as well as the overall condition of the patient; such classifications already exist.

For example, the DRG system being utilized in New Jersey has recently added a relative intensity of nursing measure, which may alleviate some of the problems associated with the reliability and validity of the DRG as a measure of cost per case.

In addition, we are watching with great interest the development of the severity of illness index, currently under study at Johns Hopkins University, as a more accurate predictor of costs per case. The patient severity index used is a matrix of seven patient characteristics matched with four levels of intensity.

Reliance on the proposed DRG mechanism for determining prospective payment will divert attention away from other alternatives that have real potential for containing the escalation of health care costs. Such additional measures, which are consistent with the general goal of prospective payment, include increased competition among vendors to hospitals, so that the rate of increase for supplies and new or replacement technologies is curtailed, or the total vendor costs to the hospital are decreased.

At a time when containing costs has never been more important, the American Nurses' Association is distressed to read the headlines in the July edition of Value Line about the health care-hospital supplies industry which stated, "Record 1982 and 1983 profits are in store for most of the companies." The industry's net profits are expected to be 15.5 percent higher in 1982 than in 1981.

Of the proprietary drug industry, the article says, "Few industries can match the proprietary drug group for recession-resistance." Their net profits will be 27 percent higher this year than last. Of the medical services industry, Value Line says "What recession? The hospital services industry is going full throttle." Their net profits will be 52 percent higher this year. Of the ethical drug industry, the comment is, "For the most part, prescription drug manufacturers remain recession-resistant." Their profits will be 11.2 percent higher this year. Will such vendors also be labeled cost containment-resistant?

Another measure that could help contain costs is the elimination of payment of costs borne through payment mechanisms for the education of medical, nursing, and other students. For decades, the American Nurses' Association has stated that the patient should not be expected to bear the costs of educating health care providers. It is unconscionable to expect that the poor, the elderly, and the disabled of this nation should be made to bear the brunt of increased copayments and deductibles and decreased services so that this subsidy may be continued.

During periods of cost containment, professional standard review and other peer review activities aimed at measuring the appropriateness of care and services should receive increased emphasis. It is of paramount importance that care and services are provided at the appropriate time, in the appropriate setting, by the appropriate provider, and with the appropriate intensity and diversity. Peer review mechanisms are an essential way to accomplish these determinations.

When cost containment requirements are placed on the health care industry, the need for quality assurance, peer review, appropriate use, and distribution of resources increases. It is of great concern to ANA that those mechanisms provided by professional standards review organizations and health planning systems have been significantly weakened by recent legislation. Although the PSROs and HSAs were far from perfect, both programs contributed to the maintenance of peer review systems and the prevention of over-proliferation of technologies, over-bedding, and over-building.

Without strong federal deterrents, cost can be expected to continue to spiral with subsequent diminution of patient access to quality services.

The length of stay of a patient in the hospital is a significant contribution to the costs of that care. Earlier discharge of patients is proposed for the prospective payment mechanism, but this will be a viable option only if sufficient outpatient clinics and community and/or home care service capacities exist. Patients may be discharged because they no longer need the intensity or variety of services provided in a hospital, but that does not mean they do not need any continuing services and care. If such services are not available in sufficient quantity, the re-admission rate of discharged patients will likely rise, thus defeating the purposes of the system.

The length of stay of a particular patient is often related to the availability of non-acute facilities to which the patient may be transferred, or the availability of home and family members who are able and willing to provide the needed support and assistance. Although earlier discharge may be a goal, the patient and family require some mechanism for continued care and services. Cost containment that applies to hospitals only is likely to lead to increased and uncontrolled costs in other areas of the health care delivery system.

Finally, a measure which can enhance the cost-effectiveness of the health care industry is the reduction of the statutory control of the medical profession over the consumer's access to special professional nursing services in the hospital, and, in the community, consumer's access to visiting nurse service and other home health care services. As stated earlier, access to nursing services is the reason why most patients are admitted to a hospital, for they could otherwise be treated in the home, or office, or in an alternative community service facility. In efforts to promote earlier discharge from the hospital and to prevent the rampant escalation of re-admission to the hospital, the consumer should have direct access to nursing services provided outside the hospital. As with PSRO's and health planning, Congress continues to make legislative decisions which conflict with the notion of cost containment.

We were deeply distressed over the vote by the U.S. House of Representative to exempt state licensed professionals from anti-trust scrutiny by the Federal Trade Commission. ANA, along with many other health and consumer organizations, has strongly opposed curtailing FTC jurisdiction.

In the face of increasing health care costs, the House has voted to remove a major deterrent to anti-competitive practice by physicians. This will serve only to increase the consumer burden of payment for health care costs.

Recent Medicare cuts by Congress and proposals of the Reagan Administration have increased the amount of out-of-pocket medical expenses to be carried by the elderly and disabled.

The FTC has focused on the costs of health care and monopolistic business practices which keep health care costs unrealistically high by shutting out cost-effective alternative health service delivery by nonphysician providers.

23

We are at a highly critical point in our history. It is clear that if we are to continue to grow and develop as a profession, we must gain control of the economics undergirding our professional services.

The development of guidelines for classification of intensity of nursing services is crucial to gaining control and, interestingly enough, we find hospital administrations more than willing to utilize this information.

Nursing researchers and nurse administrators must come together now and provide the kind of data and guidelines that are needed to support professional nursing services. This is also the charge I present to you.

DEVELOPING AND APPLYING POLICY-ORIENTED RESEARCH FOR NURSING PRACTICE AND EDUCATION

Ora L. Strickland, RN, PhD, F.A.A.N
Doctoral Program Evaluator and
Associate Professor, School of Nursing
University of Maryland at Baltimore

Policy to define the boundaries of action of professionals as well as consumers of services is necessary in all arenas which have an impact on the public. Policies regulate the behavior of individuals, agencies, and organizations by setting forth a plan intended to propagate the general good. Decision making and action based on policy occur at local, state, national, and international levels. The behavior of nurses in clinical and educational institutions is controlled by policies established by their employing agency as well as by governmental policy. Once established, policy is difficult to change.

Policy often reflects the social environment and addresses societal need. The nurse's role and the types of rewards received as well as contributions that he or she will be allowed to make to patient care, health care delivery, and nursing education are set by policy, whether through legislation or the rules and regulations of a particular institution. Nurse researchers must be cognizant of the fact that research, i.e., their research, can serve as a forceful contributor to change through the initiation, modification, or elimination of policy. Nurse researchers can affect policy 1) by identifying critical areas which need the development of new approaches or alternative strategies for the improvement of patient care, health care delivery, or nursing education, and 2) by initiating research studies which will deal with questions surrounding the critical issues. Areas which need the deliberate direct attention of clinical nurse researchers include:

1. Health Promotion
   Including stress control, exercise and fitness, reducing drug abuse, cessation of smoking, improved nutrition, and control of violent behavior

2. Preventive Health Services
   Including high blood pressure control, family planning, pregnancy and infant care, immunizations, and sexually transmissible diseases

3. Health Protection
   Including toxic agent control, occupational safety and health, accidental injury control, and infectious agent control

(U.S. Dept. HHS,PHS, 1979; 1980).

Areas which need study by educational nurse researchers are:

1. Educational approaches and strategies including studies of existing programs and of innovative programs, various teaching strategies, particularly for clinical nursing education, and program outcomes
2. Faculty roles and faculty practice
3. Educational resources and environments
4. Continuing education

Other areas which need to be focused upon for investigation by nurse researchers in order to provide data for policymaking include:

1. Nursing roles and interrelationships between nurses and other health care providers
2. Cost containment in health care delivery

3. Factors in nurse satisfaction and manpower supply
4. Organizational modes for nursing care delivery
5. Reimbursement for nursing services
6. Credentialing in nursing
7. Nurses and collective bargaining

Nursing research findings also can be used to influence resource allocation for clinical practice, nursing education, and in health care delivery at large. The nurse researcher can influence resources allocation as dictated via policy through the development and/or study of new care delivery approaches and demonstration programs to determine their benefits to clients and their costs to society (Aiken, 1981).

Nursing research is only as useful as it is in addressing the issues, problems, and needs of the larger society. Findings from nursing research studies must be systematically compiled and communicated in a manner so that the policymakers will have their full benefit in their decision-making and structuring of policy.

References

Aiken, Linda H. (Ed.). Health policy and nursing practice. New York: McGraw Hill Book Company, 1981.

Healthy people: The surgeon general's report on health promotion and disease prevention. U.S. Department of Health, Education, and Welfare, Public Health Service, 1979.

Preventing disease, promoting health: Objectives for the nation. U.S. Department of Health and Human Services, Public Health Service, 1980.

THE PROCESS, PERILS, AND JOYS
OF
COLLABORATIVE RESEARCH

Jeanette Lancaster, RN, PhD
Professor and Chairman
Master's Program
School of Nursing
University of Alabama in Birmingham

Collaborative research presents many challenges for contemporary nursing. Through pooling of intellectual, financial, and energy resources, a team of research-oriented people can make substantial contributions to health knowledge. However, it must be remembered that group process often poses hurdles to productivity just as it contributes to creativity. There is no doubt that research efforts in nursing should be accelerated, and collaboration is one way of doing so.

At least four traits characterize individuals who contribute substantially to research: intellectual curiosity, conceptual ability, competence, and creativity tempered with caution. Individual researchers need these skills; however, in any one person certain of the four requisite skills may predominate. Through collaborative research efforts, a team can be formulated comprised of members possessing these skills.

There are at least six crucial "c's" inherent in successful collaboration: contribution, communication, commitment, consensus, compatability, and credit. Each of the "c's" offers the potential to be an advantage or a disadvantage to collaboration. To elaborate, each participant brings a unique contribution to the project due to past experience, education, goals, and so on. Effective communication is essential for collaborative research to be successful. In each group there must be a "good fit" among participants whereby their personality styles and communication patterns complement rather than conflict with one another.

Members of each group will vary in level of commitment to the project. However, projects run more effectively if the level of variance is not great. Sometimes the motivation level of highly committed members will stimulate those who are less committed to complete assignments and meet deadlines. Teams also fare better if members are compatible or, at least, can recognize, respect, and capitalize upon their differences. Some members will be more skilled in generating ideas, while others can refine the ideas and draft the report. To some extent, the degree to which compatability exists will affect if and when consensus will be reached. Consensus involves a never-ending process of communication characterized by negotiation and compromise.

The final "c" of collaborative research, credit, is crucial. If arguments and hurt feelings occur around who will get credit for the project, these feelings will cloud the overall perspective of the entire project. If members are facing major decisions regarding promotion and tenure, or otherwise have a vested interest in the allocation of credit, they may not be able to clearly determine a positive course of action.

A DESCRIPTION OF NEGOTIATION BEHAVIORS IN NURSE-PATIENT VERBAL ENCOUNTERS IN HOSPITALS

Jan Biasini, RN, MSN
Administrative Resident
Hospital Administration
University of Alabama Hospitals, Birmingham

Negotiation has been defined as the exchange of ideas in order to change relationships (Nirenberg, 1968). Orem (1980) suggested that negotiation was essential between nurses and patients so that nurses might assist patients to determine their self-care requirements. The purpose of this study was to determine whether or not hospital staff nurses negotiated with hospitalized patients. If nurses and patients negotiated, what issues did they negotiate and what specific negotiation behaviors did they employ? In addition, the contextual variables affecting the negotiation were described and the outcomes of the negotiation determined.

The study was based on Orem's (1980) theory of nursing and the Strauss (1978) paradigm of negotiation. Strauss emphasized the interrelationship between the context and process of negotiation.

The first encounter of the day between 10 staff nurses and 30 patients was recorded, using a pocket tape recorder and lapel microphone attached to the nurse. Written consent was obtained from each participant. The staff nurses were graduates of baccalaureate nursing programs with at least two months of nursing experience. All worked on noncritical care medical nursing units. The patients were selected because they were being cared for by the nurses previously selected and were in stable condition with no communication impairments.

Once the 30 encounters were recorded they were transcribed by the investigator and given to a panel of three judges. Negotiation was determined to occur in a given encounter when two of the three judges, based on an operational definition of the term, agreed negotiation had occurred.

The nurses and patients were found to negotiate in eight of the 30 encounters. In seven of the eight negotiated encounters, the patient initiated the negotiation. The issues that were negotiated mainly concerned the patient's daily activities, for example, oral intake, movement in and out of bed, and bathing schedule.

The most frequently used negotiation behaviors were making promises and making concessions. The nurses and patients seldom made counter offers or initiated trade-offs. Threats were never employed.

The most important contextual variables to the negotiated nurse-patient encounter were the length of the encounter, the differences between the mean ages of the nurses and the patients, and the degree of previously developed trusting relationship between the nurses and the patients. In all eight negotiated encounters the nurses and patients reached a mutually acceptable agreement which was beneficial to both parties.

Orem (1980) indicated that negotiation was a desirable nurse-patient interaction behavior; however, nurses and patients negotiated in only eight of 30 encounters. Therefore, it could be suggested that some instruction in negotiation behaviors would be an important addition to the nursing curriculum. In the practice setting nurses need to be trained and encouraged to negotiate with their patients.

References

Nirenberg, G. The art of negotiating. New York: Cornerstone Library, 1968.

Orem, D. Nursing: Concepts of practice. New York: McGraw Hill, 1980.

Strauss, A. Negotiation: Variables, contexts, processes, and social order. San Francisco: Jossey-Bass Publishers, 1978.

CHILDHOOD SOCIALIZATION FOR VIGOROUS EXERCISE HABITS

Kathleen C. Brown, RN, PhD
Associate Professor, School of Nursing
University of Alabama in Birmingham

Many professionals assume that people perform health behaviors primarily owing to a concern for health. Some authors, however, speculate that people engage in health behaviors because of a desire for social approval or because of socially determined habits. Little is known about how individuals are socialized into health habits and why they continue or discontinue these patterns. The purpose of this research was to investigate social factors related to the performance of one health behavior—exercise. Social learning theory with emphasis on modeling and reinforcement served as a theoretical perspective for explaining the process of becoming involved in exercise.

Currently the public is preoccupied with physical fitness and health-promoting activities. Although the efficacy of exercise is still a matter of debate, health professionals and the public generally accept the importance of exercise for promoting health and preventing disease. Industries are developing programs to promote employees' leisure time physical activity, improve work performance, and decrease absenteeism. Evidence exists, however, that some persons seldom engage in vigorous activity during their lifetimes. Even in work which is considered traditionally laborious, high levels of energy expenditure are rare. Research is needed to understand factors which predispose individuals to pursue vigorous lifestyles.

The sample was 117 manufacturing employees, 41 males and 76 females, who volunteered to participate in the study. The majority of the respondents were blue collar workers. A questionnaire measuring behavioral, cognitive, situational, and sociodemographic variables was developed and evaluated by validity and reliability procedures. Frequencies, t tests, bivariate, and multivariate techniques were used to analyze the data.

Socialization questions revealed that less than one-fifth of the subjects reported that their friends, roommates, or spouses exercised frequently. In terms of childhood influences, one-half of the subjects indicated neither of their parents had encouraged them to exercise, and only one-tenth of the subjects reported their family had frequently played a sport together. Subjects who were vigorous as adults were found to have high rates of participation in childhood sports activities including Little League and high school teams, while sedentary respondents were low in childhood sports participation. Perhaps during well-child health visits, children could be encouraged to participate in sports and parents could be encouraged to support their children in physical activities.

An important finding to emerge from this study was that vigorous subjects had been active sports participants during childhood. This finding supports the notion that exercise perhaps learned for reasons unrelated to health, is a general lifestyle habit of some individuals. The view that behaviors may be learned in social situations or from experiences of other persons was supported by the positive association of performance of voluntary exercise with childhood sports participation, but failed to be supported by the weak correlation with family participation. Thus the findings provide mixed support for the social learning theory's tenet that behavior is learned in social situations.

The question of how people are socialized into exercise habits requires further research. The study could be replicated to determine if similar results are found in comparing other sedentary and vigorous groups. Studies may be done to determine the specific high school team sports which are related to adult performance of exercise and whether the number of years of participation in sports during childhood influences exercise behavior. Emphasis on socialization for exercise is consistent with the Department of Health and Human Service's attempt to shift health policy from a disease orientation to one of health consciousness and health promotion. Therefore, it is further recommended that researchers continue to explore the role of childhood socialization for developing vigorous lifelong exercise habits.

AN ECONOMETRIC MODEL—PREDICTIVE FACTORS OF SUPPLY AND SALARIES OF NURSE PRACTITIONERS

Joan Farrell Brownie, RN, PhD
Dean, School of Nursing
Medical College of Virginia
Virginia Commonwealth University, Richmond

In the last decade, the development of the new health professional (NHP), also known as nurse practitioner (NP) and physician assistant (PA), may be one of the most significant changes in the professional organization of medicine and nursing. Formal NP and PA programs have received direct federal support since 1971 under the authority of the Nurse Training Act and Health Professional Education Assistance Act. Growth in government support for health manpower has led to studies of health manpower from a policy viewpoint, including its impact upon the economic system, political organization, and the public/consumer interest and the role of professional interest groups.

Although a growing body of research literature regarding health manpower policy has emerged, studies have been primarily addressed toward defining categories of health workers and forecasting need for services. Little attention has been given to the more difficult questions concerned with geographical distribution and productivity. This study is concerned with the development of two econometric models: one to explain the difference in state by state supply of nurse practitioners, the other to explain salary differentials as a measure of their perceived value to society. It specifically investigates how supply and productivity of nurse practitioners vary with a variety of demographic, educational, and health service variables.

The problem demanded a dual level of analysis: one in which aggregate data for 50 states was used in an analysis of the relationship of supply to selected contextual variables, the other in which individual subject data for 1,012 NPs was employed in analysis of salary differentials. After evaluating the distributional characteristics of the data, multiple regression (forward inclusion and stepwise solution) was employed to test the following hypothesis:

1. The state supply of nurse practitioners in the U.S.A. varies with demographic factors, with state factors concerning distribution of hospital and medical services, and with the type of statutory laws regulating nursing and medical practice.

2. The annual salaries of nurse practitioners, as a measure of their perceived value to society (productivity), vary with demographic factors, with state factors concerning distribution of hospital and medical services, and with the type of statutory state laws regulating nursing and medical practice.

The results of this study record evidence that, of the five factors tested, the nature of the medical practice acts and the ratio of generalists to specialists consistently account for large percentages of difference in the nurse practitioner to population ratio. When type of medical practice acts was controlled, the percent of state population residing in rural areas and the nature of the medical practice acts and the ratio of generalists to specialists consistently account for large percentages of difference in the nurse practitioner to population ratio. When type of medical practice acts was controlled, the percent of state population residing in rural areas and the nature of the nurse practice acts became the most powerful predictors of difference in state-by-state supply of nurse practitioners.

It was also determined that the salaries of NPs vary consistently with a number of selected indices. Earnings prior to NP training, average hours worked per week, and highest earned nursing degree were the variables that held the most predictive power of differences in NP salaries. Their consistent ability to account for significant proportions of variance under all circumstances tested, suggest that they play the most important role in development of an econometric model to explain NP salaries. There is evidence suggesting that the NP credentials and the number of years worked prior to advanced training also contribute significantly to the explanation. Salaries were inversely proportional to the hours worked, indicating that NPs who work shorter hours tended to earn higher salaries than those who worked longer hours.

When the equations were controlled for type of nursing and medical practice laws, results concerning salary differential were not remarkably different. Notable, however, were the results regarding incomes of NPs working in states with the most restrictive nurse practice laws. The salary model under these circumstances explained the most variance (39.6%) of any of the conditions studied. Although previous earnings explained the largest amount of variance, average hours worked was not significant. The credentials of the NP, the ratio of generalist to specialist MDs, and the rurality factor were among the significant predictors. These findings indicate that in states with restraining nurse practice acts the predictor of salary differentials are somewhat different than for most other conditions tested.

Since the two econometric models tested proved to explain significant amounts of variance in the supply and the salaries of nurse practitioners under numerous conditions, its seems reasonable that the models could be used to study similar factors affecting other groups of nurses. From a policy point of view, the issues of geographic distribution of nursing services and the salaries nurses earn are among the most important problems facing health care in our nation today.

MILK YIELD ASSESSMENT IN ASSISTING MOTHERS DURING THE INITIATION OF LACTATION

Ellen B. Buckner, RN, MS
Assistant Professor, School of Nursing
University of Alabama in Birmingham

The problem of perceived or actual inadequate milk supply is one of the most common reasons given for early discontinuance of breastfeeding. This research was undertaken to identify factors which may influence milk production through alterations in physiological mechanisms. The purpose of the project was to determine ways nurses may improve their practice in the assessment and management of women with poor lactation. Other investigators have studied the influence of prolactin and the prolactin response to suckling on milk production. Nurses and physicians have attempted management protocols for breastfed infants which present with failure to thrive. The focus of the study was to delineate physiological processes which could be useful in planning the nurse's assessments and decisions regarding interventions.

Thirty-two breastfeeding mothers were seen by the nurse-investigator between two and four weeks postpartum. Each mother planned to nurse her infant at the visit. Milk yield at the feeding was calculated as the change in the infant's weight from before to after nursing plus the amount of milk remaining in the breast which could be expressed using an electric breastpump. Maternal serum samples were obtained before and after the nursing. Baseline prolactin, peak prolactin, their difference (the prolactin response to suckling), and estradiol were determined from the samples by radioimmunoassay. Other data were obtained by subject self-report in a structured interview during the visit. Length of solely breastfeeding and reasons for supplementation were obtained from phone interviews at three months. Statistical analysis was done using Pearson product-moment correlation and one-way analysis of variance.

The breastfeeding experience showed wide individual variation between mothers in the initiation phase. Milk yield at a single feeding ranged from 0.75 ounces to 8.0 ounces; infant weight gain or loss was similarly wide, ranging from a loss of seven percent of birthweight per week to a gain of eight percent of birthweight per week. There was wide variation in the number of infant stools and voids, number of letdown reflexes noted, and all hormone levels. Mean maternal caloric intake was below recommended daily allowances for lactating women. The variation observed documents the profound individual differences which exist in the breastfeeding experience and the importance of a comprehensive nursing assessment when problems arise.

The milk yield measured at the single feeding was significantly correlated with infant weight change since birth ($r = .60$, $p < .001$) and hence had criterion-based validity as a measure of intake during the initiation of lactation. There was a significant relationship between milk yield and length of breastfeeding. Those mothers who supplemented for reasons of inadequate or perceived inadequate supply had significantly lower milk yields and shorter lengths of breastfeeding than those who supplemented for other reasons and were still breastfeeding.

Hormonal findings confirmed suspected effects of some factors on the process of lactation. The prolactin response to suckling was significantly correlated with milk yield ($r = .36$, $p \leq .02$). Women who had experienced a postpartum infection or a previous breastfeeding failure had lower prolactin responses. The baseline prolactin level which had not been previously correlated in studies in the first days postpartum was negatively related to milk yield at two to four weeks ($r = -.37$, $p \leq .01$). This may represent a compensatory system or an inhibitory influence. Estradiol (a milk inhibitor) was elevated in women who reported their infants sucked poorly. This documents resumption of ovarian function when sucking stimulus is inadequate.

A nursing practice protocol is presented which describes the screening, assessment, and intervention strategies for nurses assisting clients with breastfeeding problems related to low milk supply. Screening consists of an infant weight check at two weeks with time for mother to express concerns. Criteria can be defined either broadly or narrowly to identify mothers who should be assessed further. Comprehensive assessment includes milk yield measures, interview, and possibly hormonal analyses. Decision points are delineated for determining women at risk for poor lactation who should be entered into intervention protocols. Interventions often require use of multiple modalities, including pharmacological management, manipulation of physiological stimuli, therapeutic communication, values clarification, and decision making.

This research was supported by a Nursing Research Emphasis Grant/Doctoral Programs, 5-R21-NU-00835-02.

CULTURAL DETERMINANTS OF HEALTH AND SELF-CARE IN URBAN AMERICA

Jacqueline Clinton, PhD, F.A.A.N
Associate Professor and Research Scientist
Center for Nursing Research and Evaluation
University of Wisconsin-Milwaukee

This study concerned the development of an integrative, multivariate, computer-assisted approach to the measurement of ethnic identity, and evaluation of its usefulness in cross-cultural nursing research on European-Americans. Examined were the influence of ethnicity on beliefs about health and illness, self-saliency in health, reliance on both indigenous and professional health resources, patterns of self-care, and the fit between self-perceived and professionally-diagnosed health status.

The design of the study was a descriptive survey conducted at the Institute for Social Research at the University of Michigan. A multi-stage probability sampling procedure was designed for the Detroit Metropolitan Area using 55 minor civil divisions, 22 census tracts, and 270 blocks, based on 1978 population estimates for the Standard Metropolitan Statistical Area of Detroit. The sample consisted of 645 randomly selected, non-institutionalized adults (18 or older) residing in Detroit and claiming to be of European origin. Data were collected using a pre-tested, standardized interview which was administered in each respondent's home. All empirical constructs used in the study were first submitted to reliability and validity testing. Health data were analyzed using ANOVA, MANOVA, canonical correlation, discriminant function, and linear regressions. Effects of other demographic factors were routinely removed by statistical partialling prior to evaluation of the ethnic component. The dependent construct, ethnic identity, was developed using a computer program designed to test predictive relationships using only nominal-level data.

It was discovered that white Americans are not a homogenous group in terms of their ethnic identity and patterns of health. For those who persist in identifying with European country of origin, strength of affective ties to a primary group and religion are not only the most salient factors in self-ascribed ethnic identity, they also play a significant role in shaping health beliefs, perceptions, and self-care behaviors.

The integrated, multivariate, computer-assisted approach to the measurement of ethnic identity was found to be a useful heuristic for partitioning the sample for the analysis of health data, for it allowed the investigator to discover differences in health that were not detectable when the traditional univariate approach to capturing the ethnic dimension was used. The integrated approach warrants further investigation for its potential usefulness in future cross-cultural nursing research and practice as well as cross-cultural studies in other applied disciplines. Beyond applied research, the construct used to represent ethnic identity was also found to be a useful tool for testing current theory in the area of ethnicity and advancing its development.

A COMPARISON OF ATTITUDES, WORKING CONDITIONS, AND NURSING PRACTICE OF FOREIGN NURSE GRADUATES AND U.S. NURSE GRADUATES IN FLORIDA

Marie E. Cowart, RN, DrPH
Associate Professor
School of Nursing
Florida State University, Tallahassee

This study examined certain characteristics of licensed nurses by geographic background of their basic nursing education. The purpose was to determine whether differences in attitudes, practice patterns, and working conditions exist between foreign nurse graduates and U.S. nurse graduates.

Independent systematic samples of U.S. nurse graduates and foreign nurse graduates (FNGs) were selected from individuals applying for nurse licensure in Florida from July 1, 1978 to June 30, 1980. Individuals who became licensed and who subsequently renewed their license and responded to a questionnaire accompanying the renewal form comprised the sample yields. It was noted that there was a greater loss of FNGs during the sampling process than of U.S. nurses, probably due to various causes including a high failure rate on the nurse licensure examination and a lower response rate to the questionnaire. Tests for internal consistency of the self-reported data revealed some inconsistency for select variables.

Three phases of analysis were conducted using the chi-square test to examine for differences in the proportions of the variables for two samples. First, the two samples of nurses were examined by each variable. All variables were significant at the 0.05 level of probability, but many of the differences were small. Further analysis was done for variables with a 10 percent or greater difference by examining regional subgroups among the FNGs. Four world regions had enough subjects to be studied using the chi-square test: the

Philippines, the British Isles, Canada, and Jamaica/Bahamas. Significant differences in the distributions were demonstrated for these variables: age, type of basic nursing education, opportunity to use skills, desire for a change in responsibility in the nursing position, shift worked, and annual salary. Nurses from the British Isles and Jamaica/Bahamas were observed to function most like U.S. nurses, while those from the Philippines were most dissimilar.

Further analysis was conducted by examining all variables in combinations of three variables simultaneously, using the chi-square test for three variables. Differences were demonstrated for three variable interactions for the personal/social background variables (age, type of basic nursing education), for the attitude variables (opportunity to use skills, desire for change in responsibility), and for the practice pattern variable (shift worked), and one work status variable (annual salary). Contributing to differences in the distributions in the two samples were the personal/social characteristics and the geographic origin of the nurse.

The FNG who is licensed in Florida reports many similarities to the U.S.-prepared nurse who is licensed during a like time period. Reports of choice of work setting, primary nursing speciality, attitudes about the benefit of continuing education, number of hours worked weekly, and the title of the nursing position, while statistically significant in their differences, actually are small enough to have little social significance.

Since the socially significant differences in the two groups of nurses are attributed to personal/social characteristics as well as to geographic origin, one may conclude the following: 1) Nurses choices in attitudes and practice patterns will vary by age and by their basic nursing educational preparation. 2) Nurses with cultural origins that are most distinctive from the U.S. will contribute more difference in practice than nurses whose cultural origins share many similarities with the U.S.

The study concludes that FNGs who are licensed in Florida do participate in the nursing practice to the same extent as U.S. nurses who are licensed during a similar time period.

COMPARISON OF JOB SATISFACTION BETWEEN NURSES PRACTICING IN A PRIMARY NURSING MODALITY AND NURSES PRACTICING IN A TEAM NURSING MODALITY

Jimmie G. Davis, RN, MSN
Primary Nursing Coordinator
University Hospital
Birmingham, Alabama

Since the turn of the century, nursing administrators have sought a practice modality that would increase nurse job satisfaction, prevent fragmentation of patient care, and provide individual nurse accountability for nursing actions and outcomes. Therefore, job satisfaction of nurses practicing in the various modalities (i.e., case, functional, team, primary) needs to be examined.

It was the investigator's intent through this research to answer the following research question: In a designated hospital, was there a statistically significant difference in job satisfaction between nurses who practiced in a primary nursing modality and those nurses who practiced in a team nursing modality?

A descriptive-comparative research design was developed in which questionnaires were administered to registered and licensed practical nurses (N=105) on eight medical-surgical units. The questionnaire was an adapted version of the Work Satisfaction Inventory developed by Stamps, Piedmont, Slavitt, and Haase (1978) which measured nurse job satisfaction by a Likert-type attitudinal scale. Descriptive statistics were calculated for the total nurse job satisfaction scores and the six subscores, and the means for the primary and team nursing modalities were compared using a two factor hierarchical analysis of variance. The two factors in the analysis were modality and nursing unit.

There was no statistically significant difference in mean scores of total nurse job satisfaction between nurses practicing in a primary nursing modality and those practicing in a team nursing modality. Furthermore, no statistically significant difference was found between the mean scores of the two modalities for each of the six subscores of nurse job satisfaction. However, there was a statistically significant difference among the unit mean scores for the total nurse job satisfaction and for each of the six subscores. Further research is needed to determine the factors that contribute to nurse job satisfaction.

Reference

Stamps, P., Piedmont, E., Slavitt, D., Haase, A. Measurement of work satisfaction among health professionals. Medical Care. 1978, 16 (4). 337-352.

BACCALAUREATE GRADUATES' SUCCESS ON STATE BOARDS: A PREDICTION STUDY

Mary E. Duffy, RN, PhD
Assistant Dean and Assistant Professor

Mary A. Lubno, RN, MSN
Doctoral Student

Grace A. Willard, RN, MS
Doctoral Student
School of Nursing
University of Texas at Austin

The offering of formal review courses to new graduates prior to taking the State Board Test Pool Examination (SBTPE) is a development of recent years. According to Lufkin and Jones (1981), increased numbers of State Board failures, coupled with the increased awareness of employers regarding the shortage of RNs, have contributed to the proliferation of these courses. Many agencies now have these courses as an integral part of their recruitment packages, since new graduates place high value on the availability of this formal review (Lufkin and Jones, 1981, p. 14).

Although a large number of studies have been done which document that performance on NLN achievement tests predicts performance on State Board Exams, (Wolfe and Bryant, 1978; Shelley et al, 1976; Deardorff et al, 1976; Bell and Martindill, 1976; Taylor et al, 1965, 1966), no study has been undertaken to demonstrate whether participation in a formal review course influences performance on the State Board Test Pool Examination (SBTPE). Because a great deal of time, energy and resources are invested in the planning and conduct of such courses by agencies and new graduates, a study of this type is needed to provide data upon which to base policy decisions. The cost containment implications of the content review process alone warrants such a study (Lufkin and Jones, 1981, p. 15).

Previous research analyzed data by examining the bivariate relationship between the sets of predictors and the criterion. However, this type of strategy does not account for the effect of other variables on that relationship. Since successful completion of the SBTPE is rarely decided by examining one variable at a time, the present investigators adapted the strategy used by Tripp and Duffey (1981) in their recently published study. Instead of looking solely at participation-nonparticipation in a State Board Review course, other educational predictors which might contribute to success or failure were included in the analysis. The current study sought to answer the following questions:

1. Could a discriminant function be derived from readily available student data which would allow for classification of baccalaureate graduates into one of two criterion categories: those who successfully passed the State Board Test Pool Examination (SBTPE) and those who failed the SBTPE?

2. Would State Board Review course participation-nonparticipation be a significant contributor to deriving the one discriminant function?

3. How efficient is the derived discriminant function in classifying individuals into the two criterion categories?

The sample consisted of 183 graduates of the University of Texas at Austin School of Nursing who finished school in 1981. Permission was obtained from the entire sample to secure information on the following variables: age, sex, race, SAT scores, BPA, NLN achievement scores, SBTPE scores, and participation-nonparticipation in a formal State Board Review course. Data were collected during the 1981-82 academic year. The sample was comprised of 91 percent females and 9 percent males with a mean age of 21.5 years, a standard deviation of 9.7 years, and a range of 21 to 55 years. Caucasians made up 77.5 percent of the sample; Mexican-Americans, 5.5 percent, Blacks, 1.6 percent;

Orientals, 1.1 percent and Other, 14.3 percent. Of the 183 graduates in the sample, 77 percent participated in a formal State Board Review course; 23 percent did not. Eighty-seven percent successfully passed all sections of the SBTPE; 13 percent failed one or more sections of the exam.

The data were analyzed by stepwise discriminant analysis, a multivariate technique which allowed the investigators to avoid the data-analysis problems inherent in previous research (Tripp and Duffey, 1981). A collection of discriminating variables on which the two criterion groups (SBTPE Successful—N = 160; SBTPE Not Successful—N = 23) were expected to differ were selected from available student records; sex, age, race, verbal and quantitative SAT scores, lower division and upper division GPA, 9 NLN achievement test scores, and participation-nonparticipation in a formal State Board Review course.

The one discriminant function had a canonical correlation of .37, $x^2 = 25.68$ d.f. = 3, $p. \geq .0000$, and accounted for 100 percent of the variance of the discriminant space. Utilizing the 3 variables which comprised the one discriminant function, (Race, Upper Division GPA, Verbal SAT), approximately 76 percent of the grouped cases were classified correctly. Tau, a proportional reduction in error statistic, was next computed as a direct measure of predictive accuracy and was .52. Thus, classification based on the discriminating variables made 52 percent fewer errors than would be expected by random assignments; i.e., 1 actual error versus 52 expected by chance. Participation-nonparticipation in a formal review course had very low correlations with all of the other predictors. Thus, it was not surprising to note that it was excluded in the discriminant function.

The investigators concluded that, although the analysis indicated a high degree of efficiency in classification, the findings should be interpreted very cautiously. The percent of correct prediction and tau tended to overestimate the power of the classification procedure due to the validation being based on the same cases used to derive the classification functions. The equations may have utilized idiosyncratic sampling error to create classification functions which were more accurate for this particular sample than they would be for the entire population. Future research should be carried out with larger samples utilizing a cross-validation procedure in order to validate whether the predictors of success in this sample can be reproduced.

References

Bell, J.A. & Martindill, C.F. "Cross-validation study for predictors of scores on state board examinations." Nursing Research 25: 54-57, January- February, 1976.

Deardorff, M., Denver, R. & Miller, S. "Selected National League for Nursing achievement test scores as predictors of state board examination scores." Nursing Research 25: 35-38, January-February, 1976.

Guilford, J.P. & Fruchter, B. Fundamental statistics in psychology and education. New York: McGraw-Hill Book Co., 1973.

Klecka, W.R. Discriminant analysis. Beverly Hills: Sage Publication, 1980.

Lufkin, S.R. & Jones, M.K. "Study shows review courses do not improve new nurses' performance on state board examinations." Southern Hospitals, 14, September-October, 1981.

Shelley, B. et al. "Correlation of NLN achievement test scores with state board test pool examination scores." Nursing Outlook. 24: 52-55. January, 1976.

Taylor, C. W. et al. Report of measurement and prediction of nursing performance, Part I. Salt Lake City: University of Utah Press, 1965.

__________. Selection and recruitment of nurses and nursing students. (2nd ed.). Salt Lake City: University of Utah Press, 1966

Tripp, A. & Duffy, M. "Discriminant analysis to predict graduation/non-graduation in a master's degree program in nursing." Research in Nursing and Health, 1981, 4 (4), pp. 345-353.

Wolfe, L.M. & Bryant, L.W. "A causal model of nursing education and state board examination scores." Nursing Research, 27: 311-315, September-October, 1978.

INVESTING IN NURSING: DEVELOPMENT OF AN INTENSITY-OF-NEED RESOURCE ALLOCATION TECHNIQUE

Denise E. Edwards-Weiss, MA
Assistant Project Director

Steve A. Freedman, MA
Project Director

Patricia M. Pierce, RN, PhD
Associate Director for
Nursing education and Services
R.E.A.C.H. Project
College of Nursing, University of Florida

The purpose of this study is to examine a technique for reporting and analyzing time and effort data. Results of this technique will be used to establish a staffing policy for specialized public health case management nurses.

The technique, which is based on intensity-of-service-need rather than traditional general population and demographic data, uses a specially developed time and effort reporting form. The technique was designed to permit development of recommendations to the Florida Department of Health and Rehabilitative Services under a grant from the Robert Wood Johnson Foundation in support of a project entitled Rural Efforts to Assist Children at Home (R.E.A.C.H.).

R.E.A.C.H. is a four-year demonstration project in which 16 experienced registered nurses are providing specialized decentralized health care and supportive services to Medicaid eligible, chronically-ill children who reside in a rural 16-county area in north central Florida. Under an agreement with the University of Florida College of Nursing, the nurses are concurrently enrolled in an educational program which prepares them to design complex case management plans for implementation in the home environment. The nurses live in the rural communities where they provide instruction, consultation, and coordination of services.

The nurses are required to complete a daily time and effort reporting form which permits the compilation of information, including diagnosis-related encounters of 16 types, length of each encounter, service site and recipients, and chronographic information. Nine basic data elements are collected which can be analyzed in total or by subsets. These basic data elements are also being used in relation to existing clinical and cost data. The focus of the methodology is to estimate allocation factors in the establishment of full-time-equivalent nursing positions, to predict cost efficiencies for budget justifications, and to monitor field services.

Analyses of the daily reporting forms is ongoing. An essential implication of the study is a description of the time/cost relationship in nursing services. Results of this study will be submitted to the state agency to support development of new state personnel classifications and staffing patterns for nurses providing similar services to agency clients.

THE OCCURRENCE AND TREATMENT OF AUDITORY HALLUCINATIONS

William B. Field, Jr., PhD, F.A.A.N
Professor and Assistant Dean
School of Nursing
The University of Texas at Austin

Following years of clinical data-gathering, this field study was designed to determine the occurrence, quantity, and quality of the hallucinatory process in 318 hospitalized schizophrenic patients. These hypotheses were tested:

1. Significantly more hospitalized psychiatric patients will experience the hallucinatory process than those who do not.

2. Significantly more hallucinatory experiences will be in the auditory realm than in other modalities.

3. There will be no significant differences in the number of patients expressing relief from the hallucinatory process and those not expressing relief from the hallucinatory process when prescriptions of dismissal are instigated.

4. There will be no significant differences in the number of patients expressing relief from the hallucinatory process between three modes of nursing interventions: (a) acknowledgment; (b) rationale-emotive; (c) dismissal.

The first two hypotheses were accepted in the direction proposed and were significant at the .001 level using chi square. The third, a null hypothesis related to treatment, was rejected at the .05 level using chi square. This hypothesis confirmed that hallucinations are vulnerable to prescriptions of dismissal, initiated through nursing intervention. The fourth hypothesis was rejected at the .05 level using chi square. Significantly more patients do express relief from the hallucinatory process with the dismissal method.

In summary, the results indicate that nursing intervention makes a significant contribution to the relief patients experience from the hallucinatory process, which enable them to improve in the three primary modes—thinking, feeling, and acting.

THE DRUCILLA MANTLE STUDY OF THE CURRICULUM IMPLICATIONS OF INTENDED WORK-RELATED BEHAVIORS AMONG NURSE ADMINISTRATORS IN SOUTHEASTERN U.S. HOSPITALS

Beverly Henry, RN, PhD
Associate Professor
School of Nursing
University of Alabama in Birmingham

Nurse administrators play a significant part in the quality of care patients receive, in nursing morale, and in the control of large hospital budgets. Less than 25 percent of nursing administrators, however, hold graduate degrees in nursing or administration. The majority are managing large hospital departments with minimal academic preparation.

To rectify this situation, an increasing number of university schools of nursing are developing graduate and continuing education programs in nursing administration.

But what forms are these programs taking? Available information suggests that nursing service administration curriculums are based on faculty perceptions of how nursing service administrators should function, and not on data about needed knowledges and skills derived from empirical investigations of administrators themselves.

A major purpose of the study,* therefore, was to survey directors of nursing service, and hospital administrators, to determine which knowledges and skills they believed nurse administrators needed and which should be included in formal academic and continuing education programs for nursing service administration.

---

*The data for this study was collected by Drucilla Mantle prior to her death in January 1981. Utilizing the data, the study was pursued by me through the data analysis and reporting stages. The study was funded in part by the W.K. Kellogg Foundation. The data are the property of the University of Alabama School of Nursing.

The major objectives of the study, undertaken between 1979 and 1980, were: 1) To identify and compare nursing directors' and hospital administrators' perceptions of the knowledges and skills most necessary for the role of nursing service administrator. 2) To identify and compare nursing and hospital administrators' perceptions of extent to which nursing administrators should participate in managerial decisions. 3) To identify and compare nursing and hospital administrators' opinions about which academic and continuing educational experiences should be emphasized for nursing administrators.

To accomplish these objectives, 1,000 hospitals in the 14 Southeastern states were randomly selected to participate in the study. The chief executive officers of these hospitals were mailed 15-page questionnaires for distribution to their executive level nursing and hospital administrators. The number of nursing administrator and the number of hospital administrator respondents were 206 and 208, respectively.

Frequencies, means, medians and modes, and standard deviations were determined for all items on Section 1 of the questionnaire—the section dealing with the respondents and their hospitals' structural features. T values and two-tail probabilities were calculated for the items in Section 2 for the differences between the two sample population perceptions of the extent to which nursing administrators should have knowledge and participate in administrative decisions, and the opinions of both groups about which educational experiences should be emphasized for nursing administrators.

Texas, Alabama, and Florida were the states most heavily represented by the participants, 70 percent of whom worked in governmental or non-profit medium-sized hospitals. The mean ages of the nursing and hospital administrators was not significantly different, nor were the numbers of years of employment and years in present positions.

A majority of both groups of respondents agreed that nurse managers should have master's degrees with emphasis in administration and that nurse managers should be knowledgeable about and participate in decisions on manager training, patient management, operations, and interdepartmental management. Nursing administrators agreed more strongly that nurses should be knowledgeable about and participate in physician management, financial and policy management, and the rewarding and disciplining of managerial employees.

Fifty-five percent of the hospital administrators said nurses' administrative residencies should be seven to twelve months, whereas the majority of the nurses sampled said residencies should be six months or less.

The hospital and nurse administrators agreed to approximately the same extent on 17 of the 21 items dealing with continuing education experiences which were most needed. High agreement was reached within and between the groups for nursing law, nursing administration, labor relations, and nursing practice. The two groups disagreed significantly about financial management, research, and economics.

The findings suggest that academic nursing administration curriculums be designed to prepare nurse managers who can develop and implement management training programs for their staff; that the curriculums include elements of patient management, nursing practice, finance, policy issues, processes and behaviors; and that research be integrated with nursing and management processes. Analysis of the data also suggests that continuing education curriculums be designed to emphasize nursing adminstration, nursing law, labor relations, personnel management, financial management, and nursing practice.

A QUANTITATIVE DETERMINATION OF PROGRAM IMPACT ON REGISTERED NURSE STUDENTS

Samuel T. Hughes, Jr., RN, EdD
Associate Professor and Assistant
Dean, Graduate Studies in Nursing

Dorothy J. Turpin, RN, BSN
Coordinator, IPE Alternative

John C. Reed, EdD
Associate Professor in Nursing
School of Nursing
University of Texas at Arlington

The purpose of this study was to determine the effectiveness of the course of study in effecting change in the participant's skills, knowledge, and behaviors at the conclusion of the program. A pre-test and post-test research design was used to determine the effectiveness of the Individualized Plan for Evaluation (IPE) in effecting change in registered nurse students. The IPE is a component of the generic baccalaureate degree nursing program that provides an alternative educational opportunity for registered nurses (RNs) who have completed either the Associate Degree or Diploma nursing curriculums. Eight questions were addressed in this study to subjects enrolled in the IPE alternative, and a control group. The experimental group (IPE—N = 32) was further classified into four groups according to basic preparation (associate degree/diploma) and years of nursing experience. The control group consisted of two subgroups: associate degree and diploma graduate RNs who have not enrolled in the baccalaureate degree nursing program and generic nursing students enrolled in the upper-division baccalaureate degree nursing program BNC--N = 35). The measurements used in this study for the purpose of collecting pre- and post-test data were: The Health Care Professional Attitude Inventory (1), The Watson-Glaser Critical Thinking Appraisal (2), and the Nelson-Denny Reading Test (3). Three additional post-test measurements were used in this study: NLN-Community Health Nursing Achievement Test (4), NLN-Medical-Surgical Nursing Achievement Test (5), and Virginia Gover's Nursing Performance Simulation Instrument (NPSI) (6). Data were collected from November 1979 to May 1981. Due to the high mortality rate of the subjects, the experimental sub-groups and the RNC control group were not considered in the analysis of the data. The t test was used to analyze the data at the .05 level of significance. There were no significant differences noted on the Medical-Surgical Nursing Achievement Test (NLN), Virginia Gover's NPSI, The Nelson-Denny Reading Test, and The Watson-Glaser Critical Thinking Appraisal. Significant differences were noted in the Community Health Nursing Achievement Test (IPE mean score = 80.24; BNC mean score = 57.41; t = 6.42) and in the Health Care Professional Attitude Directory. The areas of significant difference on the attitude inventory pre-test were: "indifference to credentialism" (t = 2.36); and "compassion" (t = 2.57). The areas of significant difference on the attitude inventory post-test were: "consumer control" (t = 3.15); "superordinate purpose" (t = 2.59); "attitudes of criticism" (t = 2.32); and "impatience with rate of change" (t = 3.23). There was a significant difference on the BNC pre- and post-test on the attitude inventory in the following area: "superordinate purpose" (t = 2.15). There were no significant differences on the IPE pre- and post-test on the attitude inventory.

The results of this study indicate that the course of study was effective in changing the participant's skills, knowledge, and behaviors at the conclusion of the program. The significant findings of this study were that the NLN-IPE group mean score was higher than the BNC group on the NLN-Community Health Nursing Achievement Test, and the attitude inventory indicated that the IPE group expressed a more positive attitude on the post-test in the six areas of the measurement tool than did the BNC group. This study will be replicated in part in the spring 1983 semester to evaluate the effects of the reorganization of the undergraduate curriculum with the IPE alternative.

References

Stone, H. L. Health care professional attitude inventory. Madison: University of Wisconsin. Office of Education Resources, Center for Health Sciences.

Watson, G., & Glaser E.M. Watson-Glaser critical thinking appraisal, Buros Seventh Mental Measurement Book, 11 . Highland Park, N.J.: The Gryphon Press, 1972, pp. 1212-1215.

Nelson, M.J., Denny, E.C., & Brown, J.I. The Nelson-Denny reading test (vocabulary, comprehension, rate). Boston: Hougnton Mifflin Company, 1973.

National League for Nursing, Inc. Community health nursing achievement test. New York: National League for Nursing, Inc., 1980.

National League for Nursing, Inc. Medical Surgical Achievement Test. New York: National League for Nursing, Inc., 1982.

Gover, Virginia F. Nursing Performance Simulation Instrument (NPSI). The University of North Carolina at Chapel Hill, School of Nursing.

COLLABORATION: A BASIS FOR POLICYMAKING

Kathleen Mikan, RN, PhD
Director of Learning Resources

Kathryn Barchard, PhD
Director of Research and Development
School of Nursing
University of Alabama in Birmingham

Collaboration between nursing service and nursing education has long been a desirable, but often difficult, goal to achieve. While educational institutions ascribe to the concept of collaboration and often report they collaborate with their affiliated health care agencies, little research has been conducted on the extent of this collaborative relationship. The purpose of this study was to measure the extent to which there was collaboration between nursing education and nursing service within one university setting.

While collaboration between nursing service and nursing education often focuses on collaboration in regard to selection, supervision, and evaluation of student learning experiences, this study measured the extent of collaboration in not one, but three areas of nursing practice--nursing education, nursing service, and nursing research.

Data were collected through a questionnaire sent to all nursing staff, faculty, and students who were involved in undergraduate clinical learning experiences in the university hospital setting at the time the study was conducted.

The population surveyed included 163 nursing staff, 31 faculty, and 137 students. The results were based on the responses of 81 nursing staff, 24 faculty, and 121 students.

Data were analyzed according to the perceived collaboration of each of the three role groups and according to the combined groups' perception of the extent of collaboration in regard to each of the education, nursing care, and research activities listed on the questionnaire. Similarities and differences in perceptions of collaboration regarding nursing education, service, and research were found among and between the three role groups. Also differences in perceptions were found in the extent to which there was collaboration in the areas of education, service, and research.

The implications of this study for practice, education, and policymaking are:

1. that nursing service and nursing education identify:
    a. their philosophy of collaboration;
    b. how collaboration relates to nursing education, nursing care, and nursing research; and
    c. how much collaboration there should be, given the different job responsibilities of the faculty and nursing service in a particular setting.
2. that nursing education and service continue to collaborate on nursing educational and nursing service activities and improve their collaboration in the area of nursing research.
3. that nursing education and nursing service identify ways within the setting to foster further collaboration.

PROFESSIONAL DEVELOPMENT AND CONTINUED LEARNING

Virginia Layng Millonig, PhD, CPNP
Associate Professor
Coordinator, Nursing Continuing Education
Department of Nursing
George Mason University

The purpose of this study was to investigate the relationship between motivational orientations toward learning and participation of registered nurses in continuing education activities. Motivational orientations were those underlying reasons for participation in continuing education activities; specifically the factors extracted from an analysis of the responses to the Educational Participation Scale (EPS). Answers were sought to some related questions of secondary interest which included educational background; level of position held; job satisfaction levels; and participatory behavior. The sample included 350 registered nurses who had been engaged in full-time practice for the past year. The instrument consisted of a self-administered questionnaire divided into three sections. The first section was designed to collect pertinent demographic information; the second section was an adaptation of the Educational Participation Scale; and the final part consisted of an adaptation of the Minnesota Satisfaction Questionnaire.

Factor analysis of the EPS with subsequent analysis of the relationship between these factors and participation in continuing education indicated a significant relationship between the motivational orientations of professional advancement and external expectations and participation in continuing education. Analysis of variance to determine the relationship between educational background and participation in continuing education resulted in a significant relationship. Subjects with master's degrees were the most frequent participants with hospital diploma, baccalaureate, and associate of arts degree graduates following respectively.

Cross tabulations generated for questions of secondary interest revealed a significant relationship between level of position held and participatory behavior. The most frequent participants were those at the administrative level; subjects at the staff nurse level were least frequent participants. A significant relationship was found between level of position and participation when controlled for prior education. Subjects with master's degrees at the mid-management level were the most frequent participants and subjects with associate of arts degrees at the staff level were the least frequent participants. A significant relationship was found between job satisfaction and participation when controlled for education and position level. Baccalaureate graduates at the mid-management level were high in both job satisfaction and participation. Associate of arts degree graduates at the staff level were low in job satisfaction and participation.

Results of this study indicate that both education and practice should be involved in policy-making decisions regarding continuing education and job satisfaction. Resources need to be developed that will allow the diploma-prepared nurse to enter into the educational system. Diploma-prepared nurses demonstrated high participatory behavior in this study. However, the area from which the sample was selected is rich in resources and the practice arena is supportive of the educational process. Satellite educational centers and flexible curricula need to be developed to enable the diploma nurse to pursue further education. If the profession proposes the baccalaureate degree as the professional degree, both education and practice must provide the resources. Nursing education also needs to be aware of the external forces that are motivating nurses to participate in continued learning. Professional development through continued learning must be an integrated component of the nursing process. The practice arena needs to become aware of the participatory behavior of administrative, mid-management, and staff nurse levels. Reward systems should be developed to increase participatory behavior. A comprehensive reward system may then contribute to higher job satisfaction levels. Finally, practice and education must together examine the relationship between job satisfaction and participation in continuing education: Does participatory behavior lead to increased job satisfaction or does job satisfaction influence participatory behavior?

References

Boshier, R.W. Education participation scale. Vancouver: Learning Press, 1982.

Weis, D., Dawis, R., England, G., & Lofquist, L. Manual for the Minnesota satisfaction questionnaire. University of Minnesota, 1967.

DEPRESSION AS AN EXPLANATION FOR DECREASED SUBJECTIVE TIME IN THE ELDERLY

Principal Investigator: Margaret Newman, PhD, F.A.A.N
Professor of Nursing
Pennsylvania State University

Co-Investigator: Judith K. Gaudiano, MS
Instructor, Department of Nursing
Bloomsburg State College
Bloomsburg, Pennsylvania

While some previous studies regarding temporal experience in the elderly have demonstrated marked increases in subjective time in older subjects when compared to younger groups, others show little or no difference (Bull, 1973; Newman, 1976, 1979; Engle, 1981). Time perception is clearly an individual phenomenon relative to many known factors; body temperature, metabolism drug intoxication, body movement, culture, and mode of information-processing (Hoagland, 1933; Phaff, 1968; Goldstone, 1967; Hall, 1959; Newman, 1976). Time perception relative to age has been conceptualized as a developmental index of the human being's increasing complexity across the life span (Newman, in press). Still, there are sufficient numbers of subjects within selected samples who do not demonstrate the projected pattern of increased subjective time with age, and at least two questions must be answered in this respect: Is age an adequate indicator of developmental level? Is there a state factor operating which would alter the mode of information-processing and thereby explain the deviation from what appears to be a trend toward temporal expansion with age?

To address the latter question, the variable of depression was examined in relation to subjective time.

Depression is recognized as a common and serious problem among the elderly (Goldfarb, 1960; Epstein, 1976). It is not the purpose of this study to explore reasons for this occurrence, but rather to determine whether or not the occurrence of depression might provide an explanation for the experience of decreased subjective time. Therefore, it was hypothesized that depression would be negatively related to subjective time.

Subjects for the study were volunteers from a congregate meal program in central Pennsylvania. The sample (N = 68) was restricted to women over 65 years of age (mean-age—70.44). All subjects were ambulatory and lived at home.

Depression was defined as an affective state characterized by a negative self-concept associated with self-reproach and self-blame, and was measured by the Beck Depression Inventory (BDI) (Beck, Beamesderfer, 1974). The BDI has been validated by correlation with clinicians' ratings of depression (0.65) and is sensitive to changes in clinical ratings. Although the BDI was developed and tested initially on young and middle-aged adult psychiatric patients, Gallagher (1980) has shown it to be a consistent indicator of depression in the elderly.

The BDI was administered to the sample in two groups of 30 to 35 subjects at the congregate meal center. Following completion of the BDI and a personal data questionnaire, subjects were individually tested in regard to subjective time.

Subjective time was defined as an individual's estimate of the duration of a short interval as determined by having the subject produce an interval of 40 seconds. The interval produced by the subject was timed by the experimenter using a finely-calibrated Portspring stopwatch.

A Pearson product moment correlation statistic was applied to the depression scores in relation to the subjective time estimates and resulted in a coefficient of 0.3474 ($p < .002$). Therefore, the hypothesis was supported. Higher levels of depression were related to longer production estimates, which indicate underestimation of the interval, or decreased subjective time.

From a physiological standpoint, aging is viewed as slowing down, or deterioration, accompanied by the difficulties, emotional and logistical, of adjusting to these losses. At the same time, the activity or utility theories of aging indicate that an individual can maintain or increase his or her functional capacities with aging as long as he/she stays active and fulfills a useful purpose in society. Consequently, policy decisions and health practices related to the elderly have emphasized maintaining high activity levels. Activity is viewed as positive and inactivity as negative.

The results of this study, in conjunction with previous studies of time perception across the adult life span, point toward subjective time as an indicator of quality of life. The predominant trend toward increased subjective time with aging is evidence that as one grows older, one's time is expanded. Moreover, increasing recognition of the therapeutic value of reminiscence suggests that this expanded time may represent contemplative activity, which is a meaningful developmental task of aging. Such a view casts doubt on interventive measures based solely on increased interactivity and suggests the need to explore measures designed to support and facilitate intra-activity.

References

Beck, A., & Beamesderfer, A. Assessment of depression: the depression inventory. Psychological Measurement in Psycho-pharmacology, 1974, *7*, 151-169.

Bull, D. Effects of aging on temporal experience. Unpublished doctoral dissertation, Purdue University, 1973.

Engle, V. *A study of the relationship between self assessment of health, function, personal tempo, and time perception in elderly women*. Unpublished doctoral dissertation, Wayne State University, 1981.

Epstein, L. Depression in the elderly. *Journal of Gerontology*, 1976, *31* (3), 278-282.

Gallaher, D., Thompson, L., & Levy, S. Clinical psychological assessment of older adults. In L. Poon (editor) *Aging in the 1980s: Selected Contemporary Issues in the Psychology of Aging*. Washington, D.C.: American Psychology Association, 1980.

Goldfarb, A. Psychiatric disorders of the aged: Symptomatology, diagnosis and treatment. *Journal of the American Geriatrics Society*, 1960, *8*, 698-706.

Goldstone, S. The human clock: A framework for the study of health and deviant time perception. *Annals New York Academy of Science*, 1967, *138*, 767-783.

Hall, E. *The silent language*. Greenwich, Connecticut: Fawcett Publications, Inc., 1959.

Hoagland, H. The psychological control of judgment of duration: Evidence for a chemical clock. *Journal of General Psychology*, 1933, *9*, 267-287.

Newman, M. Movement tempo and the experience of time. *Nursing Research*, 1976, *25*, 273-279.

Newman, M. *Theory development in nursing*. Philadelphia: F.A. Davis Company, 1979.

Newman, M. Time as an index of expanding consciousness with age. *Nursing Research*, 1982, *31*, (5), 290-293.

Pfaff, D. Effects of temperature and time of day on time judgments. *Journal of Experimental Psychology*, 1968, *76*, 419-422.

HEALTH STATUS OF CHILDREN IN RURAL AREAS OF THE DOMINICAN REPUBLIC: POLICY IMPLICATIONS FOR NURSING PRACTICE AND NURSING EDUCATION IN THIRD WORLD COUNTRIES

Francine E. Nichols, RNC, MSN
Assistant Professor
St. Mary of the Plains College
Wichita, Kansas (on educational leave);
Doctoral Candidate
The University of Texas at Austin
School of Nursing

Few statistics are available on the health status of children in rural areas of the Dominican Republic. The major purposes of this study were to determine: 1) the health problems of children in rural areas of the Dominican Republic; 2) differences in types of child health problems in specific villages; and 3) major areas nurses should emphasize in rural health programs for children.

This study was conducted during a two-week medical missions project in a primitive region of the Dominican Republic. Clinics were held in churches or schools in villages where health care was virtually nonexistent. The field research methodology was used.

The sample consisted of 466 children, 5 years of age and younger, who were seen in clinics held in eight rural villages. A form, which included the child's history, weight, height, vital signs, hemoglobin, chief complaint, and findings of the examiner, was used for data collection. An interpreter obtained the child's history from the parent; the child was weighed using regular household scales; height was measured using a tape measure fastened to a door frame. The McLare and Reed nomogram was used to evaluate the child's nutritional

---

This study was funded by the Southcentral Kansas Chapter March of Dimes Birth Defects Foundation.

status. A blood sample for a hemoglobin test was obtained by finger or toe stick and evaluated using a BMS hemoglobinometer. Each child received a physical examination by a registered nurse skilled in pediatric physical assessment. Seriously ill children and unusual cases were referred to a physician.

Frequency distributions and chi-square were used for data analysis. Significance was set at $p > .01$. The major health problems were protein-calorie malnutrition (66 percent), upper respiratory infections (58 percent), and otitis media (25 percent). Other health problems encountered were anemia (16 percent), impetigo (11 percent), diarrhea (10 percent), parasite infestation (9 percent), and scabies (3 percent). There was a significant difference in the types of child health problems found in specific villages.

All villages were at risk for epidemics of childhood diseases because of low immunization levels of the children. Many children were not protected against tetanus. There was a significant difference in the immunization levels--diptheria, pertussis, tetanus, and mumps, measles, rubella--of children in different villages.

Ninety-three percent of the children were breastfed (N = 466). The mean length of breastfeeding was 8½ months (N = 328). There was a significant difference in the length of breastfeeding between villages. Children in isolated villages tended to be breastfed longer.

The findings clearly indicated that many children in this study had severe health problems which could be resolved or improved by a preventive health care program provided by nurses.

Several policy recommendations for nursing practice and nursing education in Third World countries are indicated by this research: 1) Provision of preventive health care programs for children in rural villages. These programs should be developed by nurses, based upon the unique needs of each village, and implemented in cooperation with lay health workers in the villages. 2) Reduction of malnutrition through education programs that focus on the nutritional needs of the child, the importance of breastfeeding, and farming methods that increase the productivity of the land. 3) Development of nursing education programs which focus on community health, primary health care, and maternal and child health care.

Reference

McLaren, D., and Reed, W. Classification of nutrition in early childhood. Lancet, 1972, 2, 3, 146-148.

DOES CONTINUING EDUCATION IMPROVE NURSES' CLINICAL BEHAVIOR?

Sandra K. Oliver, RN, PhD
Associate Professor
College of Nursing
University of South Carolina, Columbia

This investigation was undertaken to evaluate the effectiveness of short-term continuing education workshops on the clinical behavior of nurses. The objectives of the investigation were: 1) to design and develop instruments to measure physical assessment skills of professional nurses, 2) to evaluate the physical assessment skill level of nurses in the clinical setting in relation to attendance at a short-term continuing education workshop on adult health assessment, and 3) to examine the effects of specific background variables upon the physical assessment skill level of nurses.

The research design for this investigation was a nonequivalent control group design. The control group consisted of 66 nurses who had not attended an Adult Health Screening Workshop (AHSW). The experimental group consisted of 87 nurses who had attended AHSWs; 25 nurses in the experimental group also had attended an Advanced Adult Health Screening Workshop (AAHSW). Participants in the study worked in 23 community health nursing agencies in east central Iowa.

The research instruments included an attitudinal questionnaire of variables influencing the use of physical assessment by nurses, a coding form for physical assessment, and a record analysis form of physical assessment. Demographic data also were collected. Groups were pretested with prerecord analyses. The two groups were posttested with postrecord analyses coded on site home visits, written test of physical assessment, and written attitudinal questionnaire.

The nurses did not demonstrate that their clinical behavior was changed significantly by attending an Adult Health Screening Workshop. Generally, the nurses performed very few physical assessments before AHSW attendance, and this did not change after attending a workshop. The specific assessments made and the quality of those assessments were not affected by workshop attendance. However, the nurses who had attended the Advanced Adult Health Screening Workshop did perform statistically better than the other nurse groups on the heart and lung test sections. The AAHSW focused on physical assessment of diseases of the cardiac and pulmonary systems.

From the nurses' viewpoint, their limited use of physical assessment was not caused by the lack of exposure to physical assessment, of knowledge of the anatomical and physiological bases of physical assessment, of technical expertise in the use of physical assessments, or of the support from supervisors, colleagues and clients. Although the nurses indicated that the workshops were appropriate and necessary for their jobs, they stressed that too much material was given in too short a period of time for them to retain the information, and that follow-up supervised instruction in physical assessment was necessary in the local community health nursing agencies.

Short-term continuing education workshops designed to expand the clinical skills of nursing are ineffective unless nurses frequently receive reinforcement for the regular use of the skills in the local nursing agencies. To integrate assessment skills into clinical behavior, nurses need reassurance, at the time they are doing the skills, of the appropriateness of their performance and of the correctness of their clinical perceptions. Without reinforcement and immediate feedback, the skills may not be mastered and may be forgotten.

If nurses are to expand their professsional responsibility to include primary nursing care, there must be a concerted effort by nurse administrators to stress the integration of physical assessment with the nurses' assessment of clients' nursing care and health maintenance needs. When evaluation of nurses' health assessments does not include physical assessment, it is possible that these skills will be unused and eventually forgotten.

Short-term continuing education workshops which teach assessment skills should limit the amount of data presented in a single session. Students should be given an opportunity to become relatively familiar with physical assessment skills under instructor feedback. Presentation of a large amount of data and brief practice of many skills does not lead to proficient performance of physical assessment. Formal review and reinforcement provided by the follow-up workshops proved to be of some success in helping students to integrate assessment skills into their clinical practice.

ACADEMIC CREDENTIALS ACCEPTED FOR TEACHING IN BACCALAUREATE SCHOOLS OF NURSING, MPH AND MSN

William Larry O'Neal, RN, MPH
Director of Nursing and Associate Hospital Director
Providence-St. Margaret Health Center

Cheryl M. Porter, RN, MPH
Pool Nurse (temporary)
New Orleans, LA.

Edna G. Treuting, RN, DrPH
Director, Nursing Section
School of Public Health and Tropical Medicine
Tulane University

The purpose of the study was to determine if the Master of Public Health (MPH) degree with Community Health Nursing (CHN) has credibility for teaching community health nursing in baccalaureate schools of nursing (BSN) and if the graduates with a Master of Public Health degree from Tulane University School of Public Health and Tropical Medicine had been successful in obtaining teaching positions in baccalaureate schools of nursing.

This is a descriptive, exploratory study. The population surveyed included 50 State Boards of Nursing and 84 Tulane University School of Public Health graduates residing in the United States. These graduates from 1962 through 1978 earned the Master of Public Health degree with a specialty in Community Health Nursing.

Data for the study were obtained from 49 State Boards of Nursing and 48 community health nursing graduates from Tulane through mail-out questionnaires. Two tables were utilized to demonstrate the extent of State Board acceptance of the MPH degree in Community Health Nursing for teaching community health nursing and provisions for faculty members with other graduate degrees who are currently teaching. An additional series of four tables were used to demonstrate characteristics of respondents for year of graduation, teaching status, type(s) of nursing program(s), state of employment, and extent of opposition or difficulty encountered with the MPH degree with a CHN specialty by faculty and State Boards of Nursing. Additionally, data were summarized in sentence form. No statistical testing was indicated in the presentation of data.

Of the 50 State Boards of Nursing surveyed, only one (Utah) did not respond. Two of the responding State Boards (New York and Mississippi) do not accredit baccalaureate schools of nursing. The MSN is not required for teaching in BSN programs by 29 of the 49 responding State Boards, however two of these (Maine and Rhode Island) do not accept the MPH degree. Maine preapproves faculty credentials and responded that the question of the degree was not applicable. Rhode Island was in the process of changing (1981) to a MSN requirement. Additionally, Pennsylvania and Illinois stated that they do not accept the MPH/CHN. Pennsylvania states that faculty who did not possess the MSN on employment prior to 1980 are required to do so within five years and cannot be lead teachers until completion. Illinois has a grandfather clause for faculty employed prior to 1980 as long as they remain at the same institution. Respondents indicated 45 , or 91.83 percent, of the State Boards accepted the MPH with CHN specialty for teaching in BSN programs; regulation was pending for the MSN requirement in nine states between 1981-1990, with eight having provisions for faculty with graduate degrees other than nursing.

A total of 48 (57.14 percent) of CHN graduates from Tulane responded, with 30 (35.71 percent) indicating current or previous teaching in baccalaureate or higher degree nursing programs. Only two of these respondents acknowledged some difficulty (Louisiana and Alabama). Graduate responses to a MSN requirement for teaching in respective states differed from State Board responses in Louisiana, Georgia, Michigan, Alabama, Indiana, Missouri, and Texas.

Relatively little opposition from State Boards of Nursing and faculty in baccalaureate schools of nursing exists with regard to acceptance of the Master of Public Health with a specialty in Community Health Nursing for teaching this specialty in baccalaureate schools of nursing. Of those states requiring the MSN, the majority have provisions for accepting the MPH. State Boards of Nursing should consider these findings and current trends before changing regulations.

Public/Community Health Nursing was the first Nursing specialty. Further study is recommended on a larger sample of community health nursing graduates and their unique contributions to teaching in their areas of specialization in a BSN program.

THE EFFECT OF A CITIZENS' NURSING TASK FORCE GROUP ON NURSING PRACTICE AND COMMUNITY PLANNING FOR HEALTH CARE

JoAnn H. Patray, RN, PhD
Assistant Dean for Continuing Education
College of Nursing
University of Florida at Jacksonville

A Citizens' Task Force on Nursing was organized to explore the issues related to nurse recruitment and retention in the northeast Florida area.

Volunteers and community leaders were asked to activate a citizens' study group to examine data from a wide-scale survey of nurses, hear testimony about nursing practice from health care experts, and formulate recommendations based on analysis of these data. Additional resource materials in the study process included other national and state surveys, journal articles, local and national media coverage. Task Force deliberations included analysis of often conflicting data and discussion of many-sided complex issues and their resolution. Problem areas were identified and recommendations were formulated. Follow-up studies based on the recommendations are now in process.

Problem areas identified by the Task Force were educational concerns, rapidly changing nursing roles and responsibilities, inadequate compensation, difficult hierarchical professional relationships, and a high rate of turnover and dissatisfaction in nurse positions. Task Force deliberations culminated with the drafting of recommendations related to the following areas:

- recognition of the essential need for continuing education and training for new nursing roles
- a study to identify the growing judgment and skill levels required in nursing

- determination of cost-specifications and revenue generation of nursing

- establishment of pay-grades through career laddering

- management training for nurses at all levels

- appointment of a joint steering committee of faculty and nursing educators for planning student clinical experience

- nurses' involvement in nurse practice committees and peer review

- top management appointments of nurse administrators

- career planning for all nurse employees

- a concerted effort of the health professions to provide public information on the changing role of the nurse in today's health systems.

Both nurses and consumers of health care have a vested interest in resolving issues related to nurse recruitment and retention. An informed public can provide the external power structure essential for changes in nursing practice and health care institutions for the enhancement of quality health care. Citizens' task forces on nursing can provide an accurate, objective broad data base for analyzing nurse problem areas and recommendations for changes in long-range planning and formulation of policies related to nursing practice.

THE UTILIZATION OF DERMATOGLYPHICS IN THE ASSESSMENT OF LEARNING DISABILITIES AND HYPERACTIVITY

Patricia A. Payne, RN, PhD
Instructor, School of Nursing
University of Texas at Austin

Dermatoglyphics, the scientific study of epidermal ridges and their patterns, has been demonstrated to be an important tool in such diverse areas of study as forensic science, anthropology, human genetics, and medicine (Wertelecki and Plato, 1979). It serves as a quick, inexpensive, and non-invasive diagnostic tool for a variety of genetic, chromosomal, and perinatal disorders (Schaumann and Alter, 1976). The overriding purpose of the present investigation was to determine the usefulness of this method in the clinical practice of nursing; more specifically, the usefulness of dermatoglyphics in predicting differences in the diagnoses of learning disabilities, hyperactivity, and learning disabilities plus hyperactivity.

The concepts of learning disability and hyperactivity are similar to many other concepts in nursing in that they lack clarity. The confusion stems from the concepts being poorly defined, both theoretically and operationally, and from the lack of a clearly identified etiology for each of the conditions (Fine, 1977; Ross and Ross, 1976). Nurse practitioners, confronting the reality of human beings experiencing learning and behavioral problems, might structure more accurate and appropriate interventions if they had a better understanding of the causation of such problems and a quick, inexpensive means of screening for possible etiological influences. Theoretically, dermatoglyphics should provide a means for screening for learning disabilities and/or hyperactivity resulting from genetic or perinatal influences.

The formation of the dermal ridges, their patterns, and place and frequency of occurrence is to a large extent genetically determined (Holt, 1968). If the phenomena of learning and/or behavioral problems have a genetic etiology, the dermatoglyphics of persons with the same problems should be similar. Dermatoglyphic formation is also affected by the uterine environment (Holt, 1968). If the learning and/or behavioral problems are the result of perinatal insults which have common effects on the uterine environment, the dermatoglyphics of the persons with the same problem should be similar. If the problems result from other factors or if they are the same phenomena, dermatoglyphic data would not serve to distinguish among the groups.

This study attempted to determine if dermatoglyphic data could contribute to correctly predicting the diagnoses of learning disabilities, hyperactivity, and learning disabilities plus hyperactivity. It was hypothesized that the three diagnostic categories represent three distinct concepts and that persons included in one category could be distinguished from persons in the other categories. It was also hypothesized that each of the three diagnostic categories was composed of etiologically distinct subgroups.

The sample consisted of a total of 255 cases of children diagnosed as learning disability ($N = 136$), hyperactivity ($N = 41$), and learning disability plus hyperactivity ($N = 78$). Demographic and dermatoglyphic data were obtained from an established data bank in central Texas. The data obtained were analyzed using discriminate analysis, a technique designed to identify differences among groups on several variables simultaneously.

The discriminate analysis of the dermatoglyphic and sex data of children with these diagnoses yielded a significant discriminate function ($x^2 = 65.27$, df = 40, $p < .007$). The classification results for predicted group membership were also significant ($x^2 = 49.12$, df = 4, $p < .001$). The discriminate analysis of the dermatoglyphic and sex data of children in the three diagnostic groups who had a positive family history of learning and/or behavioral problems also yielded a significant discriminate function ($x^2 = 65.01$, df = 4, $p = .0075$) and classification results ($x^2 = 48.69$, df = 4, $p < .001$). The discriminate analysis of the same variables for children with the three diagnoses but with a negative family history failed to yield a significant discriminate function. The findings lend support to the notion that the three diagnostic categories represent distinct and separate phenomena and that within the categories exist etiologically distinct subgroups.

Further research is definitely needed in this area. If the findings of this study can be supported and refined, dermatoglyphic data could become a very important tool in the nurse's assessment of persons with learning and/or behavioral problems. Dermatoglyphics may also provide definitive data for persons responsible for formulating policies and legislation regarding genetic counseling and early detection and intervention for persons with learning disabilities and/or hyperactivity.

References

Fine, M.J. (Ed.) Principles and techniques of intervention with hyperactive children. Springfield, Ill.: Charles C. Thomas, Publisher, 1977.

Holt, S.B. The genetics of dermal ridges. Springfield, Ill.: Charles C. Thomas, Publisher,1968.

Ross, D.M. and Ross, S.A. Hyperactivity: Research, theory, and action. New York: John Wiley and Sons, 1976.

Schaumann, B. and Alter, M. Dermatoglyphics in medical disorders. New York: Springer-Verlag, 1976.

Wertelecki, W. and Plato, C.C. (Eds.) Dermatoglyphics—fifty years later. New York: Alan R. Liss, Inc., 1979.

DISCOVERY OF NURSING GESTALT IN CRITICAL CARE NURSING: THE IMPORTANCE OF THE GRAY GORILLA SYNDROME

Sue Holland Pyles, RN, MSN
Assistant Professor
Division of Nursing
College of Life Sciences
Louisiana Tech University

This research addresses the question: What variables influence the development and use of assessment and decision-making skills of critical care nurses? While these skills are inherent to critical care nursing, little attention has focused on what the underlying cognitive process involves or how it is developed and used. When these processes are not completely developed, nurses and patients are often placed in vulnerable situations. These problems are of particular interest to nursing service and education, in that nursing shortages and high turnover rates have resulted in the increased use of new graduates and less experienced nurses in critical care units.

The research approach was that of grounded theory, a form of qualitative methodology. Data were collected from interactions and in-depth interviews with 28 registered nurses who work in medical intensive care units of eight, predominantly large, metropolitan hospitals.

Findings from this study led to the generation and validation of Nursing Gestalt as the cognitive process used by veteran critical care nurses in making assessments and judgments. Nursing Gestalt is a matrix operation whereby nurses relate basic knowledge, past experiences, identifying cues, and sensory clues, including what nurses call "gut feelings," to arrive by means of differentiation at diagnoses upon which they base their care. Experience and mentor-neophyte relationships, termed the Gray Gorilla Syndrome, were found to be the most important factors in the development and use of Nursing Gestalt.

The Gray Gorilla Syndrome involves the teaching-learning process and support system the critical care neophyte derives from a mentor--the Gray Gorilla. The term is descriptive and refers to the silverback primate who serves as a leader-teacher-protector-role model for his group. The nature, benefits, causes and effects of its absence, and the development of the Gray Gorilla were discussed. It was postulated that whether neophyte nurses in critical care units will actually achieve success will depend a great deal on their socialization into that world; that development of Nursing Gestalt, when it does occur, is an unintended result of the naturally occurring mentor-protege relationships; that development of Nursing Gestalt, without the presence of a mentor, can occur, but it requires much experience, which is hallmarked by trial and error.

These findings provide direction to those involved in nursing practice, nursing service, and nursing education. By identifying Gray Gorillas, encouraging their use and development, providing positive feedback for their efforts, and recognizing their contributions to nurses and nursing, great strides could be achieved in reducing the problems of patient care, burnout, and nursing turnover in critical care units.

Other recommendations include those which could enhance the development and use of assessment and decision-making skills of critical care nurses through the implementation of: (a) the assessment criteria identified in this study; (b) standardized scales to document subjective findings; (c) flow sheets designed for the specific needs of medical intensive care units to aid in the detection of trends; (d) guided experiences with Gray Gorillas in the development of critical care neophytes; (e) Nursing Gestalt as the basis for the decision-making process; (f) in-service and continuing educational programs specific to the needs of critical care nurses.

EFFECTS OF INTERMITTENT MANDATORY STIMULATION ON APNEA AND $TcP0_2$ IN PREMATURE INFANTS

Patricia Boudolf Rausch, RN, MSN
Staff Nurse

Jeffrey M. Majewski
Respiratory Technician
Shandi Teaching Hospital

Gene Cranston Anderson, PhD, F.A.A.N
Professor and Research Coordinator
College of Nursing
University of Florida

The purpose of this study was to determine the effect of intermittent mandatory stimulation (IMS) upon apnea and transcutaneous arterial oxygen tension ($TcP0_2$) in the infant with respiratory distress syndrome. The sample consisted of 10 premature infants who were not intubated or receiving theophylline, and who were diagnosed as having apnea followed by bradycardia. Informed parental consent was obtained.

The IMS treatment consisted of rhythmic and moderate inflation and deflation of an anesthesia bag 16 to 20 times per minute. This was done with time-cycled intermittent positive pressure ventilators. The intention was to provide movement similar to that which the premature infant, if still a fetus in utero, would have experienced from maternal respirations. Each infant was placed on the IMS bag for two consecutive hours, divided into eight 15-minute periods. The IMS bag was turned off during Periods 1, 3, 5, and 7, and turned on during Periods 2, 4, 6, and 8. Heart rate, respirations, and $TcPO_2$ were recorded once each minute. Apnea was measured with an apnea monitor set at 20 seconds.

During the periods that the IMS bag was turned on the mean heart rate was 163, as opposed to a mean heart rate of 154 while the IMS bag was turned off ($p < .0001$). Similarly, mean $TcPO_2$ was 70 during the "on" periods and 56 during the "off" periods ($p < .005$). There was only one apneic episode during "on" periods, as opposed to 22 episodes for "off" periods ($p < .0001$). Mean respiratory rate was 42 for both "on" and "off" periods.

The IMS treatment appears to have potential for increasing $TcPO_2$ and reducing apnea noninvasively, nonmedically, and relatively simply. Cost effectiveness is possible through use of out-moded but functional ventilators stored in many hospitals.

A VALIDATION STUDY OF CORE ITEMS FOR A GRADUATE MATERNAL-INFANT NURSING CURRICULUM

Rene M. Reeb, CNM, PhD
Associate Professor, School of Nursing
University of Mississippi

Two major problems were identified in the literature concerning delineation of clinical course content for graduate nursing curricula. The first was the lack of research related to the design and focus for graduate education in nursing; the second related to the lack of a clearly defined body of knowledge that constituted the discipline of nursing. This was not peculiar to the United States, as the structure of nursing programs was one of the international concerns among leaders in nursing education attending the International Council on Nursing's 16th quadrennial congress in Tokyo, June 1977.

The primary purpose of this study was to determine if graduate nurse educators prepared at the master's degree level in three functional role areas would validate select knowledge and skill items as a clinical core. This core could be used for the development of course content for maternal-infant graduate nursing students who were enrolled in one of the three functional role areas. A secondary purpose was to measure any significant differences in the frequency of responses among the graduate nurse educator groups.

A descriptive survey design using a mail-out questionnaire to a national sample of graduate nurse educators was used for the study. A pilot study was conducted. Internal consistency and content validity of the instrument were determined. The instrument consisted of 60 items. A 75 percent agreement response among the three groups of graduate nurse educators was required for an item to be considered core.

Data from 107 survey instruments (77 percent) were included for the study analyses. Internal consistency was established at r = .93 using a Kuder-Richardson formula (KR = 20). Forty-two of the 60 items met the criteria for core. For two of the items (one core, one not core) there was a significant difference in how the graduate nurse educators responded, as measured by the chi-square test at p = .05.

The identification of a core clinical content area for maternal-infant graduate nursing students enrolled in multiple functional role areas could be beneficial for program structure development. Development of a multi-track curriculum design with didactic core clinical content areas would accommodate larger groups of students and provide for increased efficiency in faculty utilization. The increased interaction across functional role areas could facilitate research efforts among maternal-infant clinical nursing leading to formulation of theoretical constructs and model development for the maternal-infant clinical nursing area.

SECONDARY ANALYSIS OF DATA ON NURSES' ETHICAL JUDGMENTS MEASURED BY TYPE OF BASIC EDUCATION AND CLINICAL UNIT

Barbara J. Reid RN, EdD
Associate professor

Janet M. Burge, RN, PhD
Professor and Chairman
Graduate Program
University of Alabama in Huntsville

Studies dealing with cognitive theory of moral development have been widely documented. Works by Piaget (1965), Kolberg (1969), and Rest (1974) have served as studies basic to the area of moral development. These studies were based almost entirely on subjects' responses to hypothetical dilemmas. Studies by Jacobs (1979), Damon (1977), and Haan (1978) show some documentation that moral reasoning in hypothetical situations is comparable with moral reasoning made in real-life situations.

In nursing, which uses the problem-solving process for basic decision making, there is little documentation which deals with the personal value structure of nurses and the impact of relationship of these values on decision making. Crisham (1980) found a low but significant correlation between nurses' moral judgment about hypothetical dilemmas and moral judgment about real-life dilemmas. She had expected to find a significantly higher correlation between the two.

It is felt that as medical care becomes more highly technical and specialized, moral decision making by nurses will become more complex. The purpose of this study was to expand and build on the research being done in all phases of decision making by nurses in clinical settings. Since the educational preparation has been documented as the most powerful correlate of moral judgment development, it was selected as one of the variables for this study. The second independent variable was the type of unit on which the nurse worked. These were divided into four major categories: Surgical, Medical, Maternity, and Intensive Care.

Three null hypotheses were formulated to test the research question at the .05 level of significance. What effect does basic nursing educational preparation and the type of unit worked on have on moral decision making? The hypotheses were: 1) There will be no difference in mean weighted rank scores between 3 levels of nurses' basic educational preparation, regardless of unit where employed; 2) There will be no difference in mean weighted rank scores of nurses working on four different units, regardless of basic education preparation; 3) There will be no interaction between basic educational preparation and type of unit worked on as measured by mean weighted rank scores on the Nursing Dilemma Test.

A convenience sample of 92 nurses from several north Alabama hospitals was used. An SPSS two-way fixed effects analysis of variance was performed. As a result, there was a failure to reject all three null hypotheses (Unit $p > .007$; Educational Level $p > 835$; Unit by Educational Level $p > .628$).

In the sample of registered nurses tested, basic educational level or unit on which the subjects worked did not make a difference in their ethical decision making. Is nursing education making any impact on teaching ethical decision making? Probably not at this point in time. However, would we obtain the same results five years from now--particularly when the teaching of ethics is just coming to the forefront of nursing education? There is also a difference between real life dilemmas versus hypothetical situations. An interesting topic for further research is to have a sample of practicing nurses discuss the scenarios of the NDT and then do the instrument. Would there then be a significant difference due to basic educational experience, unit worked , and age?

References

Crisham, P. Moral judgments in hypothetical and nursing dilemmas. Doctoral dissertation, University of Minnesota, 1979. Dissertation Abstracts International, 1979, 40, 4112-B.

Damon, W. The social world of the child. San Francisco: Jossey-Bass, 1977.

Hann, N. Two moralities in action contexts: Relationships to thought, ego regulation and development. Journal of Personal and Social Psychology, 1978, 36, 286-305.

Jacobs, M.K. Women's moral reasoning and behavior in a contractual form of prisoners' dilemma. Doctoral dissertation, University of Toledo, 1976.

Kolberg, L. Stage and sequence: The cognitive-developmental approach to socialization. In Handbook of socialization theory and research, ed. by D.A. Goslin. Chicago: Rand McNally, 1969, pp. 347-480.

Piaget, J. The moral judgment of the child, translated by M. Gabin. New York: Free Press, 1965.

Rest, J.R. Manual for defining issues test: An objective test of moral judgment. Minneapolis: University of Minnesota, 1974. (mimeographed)

THE RELATIONSHIP BETWEEN SELECTED ENVIRONMENTAL VARIABLES AND THE GROWTH OR DECLINE OF BACCALAUREATE, ASSOCIATE DEGREE, DIPLOMA, MASTER'S, AND DOCTORAL PROGRAMS IN NURSING BETWEEN 1960 AND 1978

Mary Ann Rose, RN, MSN, EdD
Acting Director of Graduate Studies
School of Nursing
East Carolina University

Since the early Sixties, the number of nursing education programs of various types has changed markedly. Hospital-based programs have decreased while those based in community colleges have increased dramatically. Baccalaureate programs have increased slowly, but the number of master's and doctoral programs has risen sharply. The objective of this study was to determine whether there was a relationship between these organizational changes and selected environmental variables. Environmental variables included wages of nurses after graduation, federal funds awarded to nursing education programs, the controversy over educational requirements for entry into nursing, accreditation requirements for director and faculty in nursing education programs, and career options open to women.

Using population ecology (Aldrich, 1979) and resource dependence (Pfeffer and Salancik, 1978) perspectives for viewing organization-environment relationships aggregate data for the years 1960 through 1978 were collected to measure changes in each variable. Analysis revealed a strong positive relationship between wages of graduate nurses and the number of associate degree and baccalaureate programs. An equally strong inverse relationship was demonstrated between wages of nurses and the number of diploma programs.

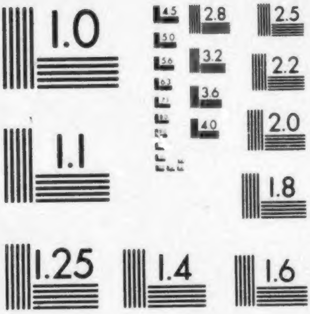
There was a relationship between federal funds awarded to baccalaureate and associate degree programs and the number of these programs. No such relationship emerged between funds awarded to diploma programs and the number of these programs. There was no relationship between the controversy over the entry level requirements and the number of any type of program.

Accreditation requirements were related strongly to changes in the number of baccalaureate programs and inversely related to the number of diploma programs. They were less strongly related to the number of associate degree programs. A particularly strong relationship, however, was demonstrated between accreditation requirements for faculty and director of baccalaureate programs and the number of doctoral programs. Finally, there was a strong inverse relationship between career options for women and the number of diploma programs and a strong positive relationship between these options and the other types of programs.

These findings have important policy implications. First, the findings clearly indicate that the larger unfolding events in our society have a significant effect on the survival and growth of schools of nursing. In essence, it places the role of the administrator in our educational organizations in a different perspective because the administrator may not be totally responsible for the fate of her own organization; the organization may be a "victim" of forces in the larger system itself. The recent closure of several baccalaureate programs may be a good example of this phenomenon. Administrators of schools of all types should be taking an active role in trying to influence these environmental factors.

Second, it is apparent that some forces or "trends" in nursing today may have effects on the profession which are not intended by those who originate or favor the change in question. For example, nursing has applauded the growth of the women's movement for the increased

PG



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

autonomy which it promises for the profession. However, it may be that this societal force may also impact on the distribution of our schools of nursing in ways which were not intended by nursing itself. In evaluating the long-term impact of both present and proposed policy, therefore, we must focus not only on the impact of such policy on the practitioners of nursing individually but also on the policy impact on the nature and distribution of nursing education organizations themselves.

References

Aldrich, H. Organizations and environments. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1979.

Pfeffer, J. and Salancik, G. The external control of organizations. New York: Harper and Row, 1978.

RELATIONSHIP OF LIFE STRESS TO DYSFUNCTIONAL UTERINE BLEEDING IN WOMEN OF CHILDBEARING AGE

Ann M. Rosenow, RN, PhD
Associate Professor
University of North Carolina at Greensboro

James Geyer, PhD
Director of Immunology
Roche-Biomedical Laboratories
Burlington, North Carolina

The relationship between life stress and dysfunctional uterine bleeding (DUB) in women between the ages of 20 and 45 was examined in a correlational survey incorporating both psychosocial and physiologic measurements. Subjects were 25 women with abnormal uterine bleeding for which no organic cause could be found through the usual diagnostic techniques, and a control group of 25 women with normal menses. Data were collected through gynecologic histories and physical examinations, administration of the Life Experiences Survey (Sarason, 1979), and collection of blood and saliva samples.

Results were that women with DUB reported significantly greater negative impact from recent life events than did women in the control group (t = -225, df =49, p = .029). Although women with DUB reported greater stress in their daily lives during history taking than did women in the control group, the difference was not statistically significant (t = 1.85, df = 49, p = .07). There was a significant correlation between negative impact from recent life events and report of stress in daily life (r = .72, p = .000). There was no statistically significant difference in blood and saliva control levels between women with DUB and women in the control group, or any significant correlation between life stress and blood and saliva cortisol levels. The correlation between blood and saliva cortisol levels was significant (r = .36, p = .007). Findings suggest that an association exists between recent stressful life events and DUB. Physiologic correlates of this stress were not detected in this study.

References

Saranson, I.G. "Stress and Anxiety." Vol. 6, Washington, D.C. : Hemisphere Publishing Corporation, 1979.

Special appreciation is given to Roche-Biomedical Laboratories for the laboratory work in this research; to Jeanne Sears, MSN student at University of North Carolina at Greensboro School of Nursing, for assistance in data collection; and to Charlie Carrico and Chips Chapman, Radioimmunoassay Supervisors at Roche-Biomedical Laboratories for conducting the laboratory tests.

This research was supported by a Faculty Excellence, Summer Research Fellowship from the University of North Carolina at Greensboro.

THE ROLE OF FACULTY PRACTICE IN NURSING ACADEMIA

Deidra Henley Sanders, RN, MSN
Instructor
Associate Degree Program

Kathleen Bellinger, RN, MS, EdD
Acting Associate Dean
Graduate Program

Jacquelyn Reid, RNC, EdD
Associate Professor
Graduate Program
School of Nursing
University of Louisville

Nurses in academia have continually wrestled with the dilemma of theoretical teaching in a discipline evidenced by clinical practice.

A survey of 287 NLN-accredited baccalaureate nursing programs was conducted to ascertain the policies regulating faculty clinical and/or consultative practice. The 124 participants were located in private and public institutions of higher education and represented 42 states and the District of Columbia. Sixty-seven percent (83 programs) of the respondents reported that there was no policy developed, although twenty-seven percent (24 programs) indicated that at least some or all of the faculty were engaged in practice outside their academic responsibilities. Twenty-eight percent (35 programs) reported a policy at the institution. Sixteen percent (20 programs) used the institutional policy as a guideline for regulating faculty activities. Eighty-seven percent (10 programs) reported having a policy specific to the department or school of nursing. Two programs indicated that faculty were not permitted to engage in clinical or consultative practice during the contract period.

Numerous implications, having profound effect on schools of nursing, health sciences centers, and overall university faculty practice, arise from the above data. Because the federal and state monies are becoming scarce, joint faculty practice may emerge as a means of compensation for reduced funds. The lines of authority, accountability, and responsibility are issues that must be addressed. The benefit to education would be evidenced in more skilled practitioners if there was increased access to research settings and facilities where new knowledge may be tested. Nurse educators must be committed to further development of both theory and practice of nursing.

A model arranging joint practice options within a Health Sciences Center milieu is presently being proposed for implementation in the fall of 1982.

THE RELATIONSHIP BETWEEN SELF-CONCEPT AND SOCIAL ACTIVITY OF LEUKEMIC AND HEALTHY SCHOOL-AGE CHILDREN

Joanne B. Scungio, RN, PhD
Associate Professor
School of Nursing
University of Alabama in Birmingham

This descriptive study sought to determine the relationship between self-concept and social activity of leukemic and healthy children. Three subproblems were investigated: (a) Is there a difference between self-concepts of leukemic and healthy children? (b) Are the social activities different between leukemic and healthy children? (c) Is sex a contributing factor in the differences between self-concept and/or social activity of leukemic and healthy children? A phenomenological approach to self-concept theory was used as the theoretical framework.

The study population was comprised of 40 randomly selected school-age children (8-12 years of age)—20 children with acute lymphocytic leukemia from a pediatric oncology clinic and 20 healthy children from a neighborhood in southern New England.

Tools utilized to obtain data on children's self-concepts included: (a) the Piers-Harris Children's Self-Concept Scale, (b) human and self-figure drawings, (c) the Wish Expression Test, and (d) semi-structured interviews. To determine social activity of children, the Children's Social Activity Scale was utilized. Analysis of variance, chi-square analysis, and Pearson product moment correlation were utilized in the data analysis. The data were analyzed for the total sample and for group and sex differences.

The findings of the study indicated that: (a) leukemic children had significantly lower self-concepts than did healthy children, (b) leukemic children included significantly more emotional indicators on their human and self figure drawings than did healthy children, (c) leukemic children's positive and negative wish responses on the Wish Expression Test reflected illness-related items significantly more frequently than did healthy children, (d) leukemic children participated in significantly fewer social activities and more non-social activities than did healthy children, (e) no major sex differences were found between the two groups, (f) a strong positive relationship was found between children's self-concepts and social activity, (g) leukemic children who knew their diagnosis reported higher self-concepts and social activities than those children who did not know their diagnosis, and (h) many parents of leukemic children demonstrated over protection in their children's social activities and were dishonest in telling the children about their diagnosis and treatment.

Results of the study suggest that the ramifications of a chronic illness such as leukemia produce numerous psychosocial stressors in the school-age child. Many of the stressors may be ameliorated if pediatric oncology nurses implement education programs to assist families and teachers in understanding and identifying the ramifications which frequently occur.

References

Piers, E.V. and Harris, D.B. Manual for the Piers-Harris children's self-concept scale. Nashville: Counselor Recordings and Tests, 1967.

Koppitz, E. Psychological evaluation of children's human figure drawings. New York: Green and Stratton, 1968.

David, H.P. The projective question: Further exploratory studies. Journal of Projective Techniques, 1957, 20, 292-300.

Scungio, J.B. The relationship between self-concept and social activity of leukemic and healthy school-age children. Unpublished doctoral dissertation, University of Pittsburgh, 1981.

BACCALAUREATE NURSING PROGRAM EVALUATION BY ALUMNI AND ALUMNI EVALUATION BY THEIR EMPLOYERS, UTILIZING SURVEY QUESTIONNAIRES: POLICY IMPLICATIONS

Virginia R. Strozier, RN, MA
Associate Professor

Lois N. Knowles, RN, PhD, F.A.A.N
Professor

Jennet M. Wilson, RN, MA
Associate Professor

Tanya L. Bobo, RN, MN
Assistant Professor

Diane B. Greene, RN, MSN
Assistant Professor
University of Florida, College of Nursing

Faculty members need to have program evaluation information from their graduates and their employers for possible modification of their programs, to meet accreditation requirements, and to identify psychological and social forces affecting the evaluation of the program. It is important to find instruments that will produce such information as accurately and as economically as possible.

The primary purpose of this research was to enable faculty members to know the evaluation of the program by alumni and the evaluation of the performance of alumni by their employers.

The researchers developed instruments to gain information which would establish the relationship between the dependent variables of alumni evaluation of the objectives of the nursing program and the alumni professional performance, and the independent variables of curriculum change, employer ratings of graduates of other programs, and educational level of employers.

The population was defined as all alumni of the University of Florida nursing program who graduated from spring 1960 through fall 1979 and their employers.

The population was divided into three groups: Group I consisted of alumni (N = 795), response rate (N = 404), who were graduated spring 1960 through spring 1977, and their employers (N = 795), response rate (N = 201); Group II were alumni (N = 299) who were graduated summer 1977 through fall 1979, response rate (N = 161), and their employers (N = 299), response rate (N = 97). Group III, comprised of the sum of Group I and Group II, consisted of 1,094 alumni, response rate (N = 565) and 1,094 employers, response rate (N = 298).

This non-experimental project was a static group comparison evaluative study; the survey approach was used.

Findings show: 1) 79 percent of the responding alumni rated the program as excellent or above average; 2) 99 percent of responding employers held an overall opinion of the alumni as outstanding or satisfactory; 3) the proportion of alumni who graduated from a block curriculum rated outstanding by their employers did not differ significantly from the proportion rated outstanding who graduated from an integrated curriculum; 4) the alumni's rating of the program is not significantly correlated with the employers' rating of the alumni; 5) the alumni's rating of the program is not significantly correlated with the employer's comparison of the graduate with other nurses having a baccalaureate degree; 6) the educational background of the evaluator is significantly correlated with the evaluator's overall opinion of the graduate.

The questionnaires were tested for reliability and evaluated as to their internal and external validity. Statistical analysis revealed significant reliability (a=.82).

Qualitative analysis of the questionnaires showed several sources of external and internal invalidity might exist. The researchers believe that the alumni questionnaire may be used by faculty from other programs by substituting their own objectives. If used by a large number of nursing programs, a data bank of information could be obtained that would be potentially useful for making decisions on a national basis.

The positive evaluation by the alumni and employers reassured the faculty and administration that the curriculum was meeting their needs; supplementary data indicated that the program was meeting the needs of society. This is particularly important for continued funding and support by administrative and political officials. Faculties need to weigh curriculum changes carefully to justify the time, energy, and expense involved in such changes. Consistency in content of nursing programs and adherence to criteria designated by the National League for Nursing may have contributed to the fact that employers were not able to distinguish alumni in the study group from others with similar preparation. The tendency for employers with similar or higher educational background to evaluate alumni higher than those with different preparation is important for new graduates to know.

DIABETIC COMPLIANCE BEHAVIORS AND THEIR RELATIONSHIP TO SELECTED VARIABLES

Ann E. Smith, RNC, PhD
Associate Professor
School of Nursing
University of Alabama in Birmingham

The purpose of this study was to identify a relationship between knowledge of diabetes, health perceptions, interpersonal values, and the level of compliance of the adult diabetic patient as reported by the patient, and between the level of compliance as reported by the patients and the patients' level of compliance as reported by the nurse practitioner. A descriptive survey design was utilized to determine whether a significant relationship existed among the variables.

The subjects of the study were 76 adult members of a Health Maintenance Organization. Five nurse practitioners were the professionals who participated in the study.

Four instruments were mailed to the subjects: Compliance Report and General Information about Diabetes, which were developed by the researchers; Health Perceptions Questionnaire (Ware, 1973); and Survey of Interpersonal Values (Gordon, 1976). Each nurse practitioner completed the Professional Report of Compliance, a researcher-developed questionnaire, for the subjects for whom the nurse was primarily responsible.

The data were analyzed on the Texas Woman's University computer system using the SPSS (Statistical Package for Social Science) for Decsystem-20. Evaluation of the data utilized Pearson Product-Moment Correlation and the Factor Analysis techniques. The .05 level was set as the level of acceptable statistical significance.

It was proposed that if levels of compliance are related to patients' health perceptions and interpersonal values, then the nurse practitioner through identification of these perceptions can design theory-based nursing intervention, and can apply principles of management to implementation, for the purpose of providing effective, cost-efficient health care.

Analysis of data indicated statistically significant relationships among variables of the study.

References

Gordon, L.V. Survey of interpersonal values. Chicago: Science Research Associates, Inc., 1976.

Ware, J. Conceptualization and measurement of health in adults. Vol. V, General Health Perceptions. California: Rand Co., 1978.

THE IDENTIFICATION OF SELECTED STUDENT FACTORS, PRIOR TO ADMISSION INTO THE NURSING SEQUENCE, IN SUCCESSFUL COMPLETION OF A BACCALAUREATE NURSING EDUCATION

Patricia E. Thompson, BSN, EdD
Associate Professor
College of Nursing
Northwestern State University

The problem with which this study was concerned was the identification of selected factors, prior to a student's admission into the nursing sequence, that may be related to the student's success in completing a baccalaureate nursing education. The purposes of the study were 1) to determine if there is a relationship between the reading ability of baccalaureate nursing students and their grades in their initial nursing course, 2) to determine if there are statistically significant differences in reading abilities among traditional groups and identified non-traditional nursing student subgroups (men, older students, blacks, Hispanics, and others) of the population, and 3) to determine if prior educational experience (junior college, senior college, or a previous baccalaureate degree) is related to students' grades in the initial clinical course.

The population of the study was limited to two classes of nursing students (N=145) who were in their initial clinical course at a state-supported institution located in a large metropolitan area. This population was composed of 135 females and 10 males; of these, 123 were white, 10 were black, 3 were Hispanic, and 9 were of other ethnic backgrounds. Information obtained on each student includes (1) total percentile score on the Nelson-Denny Reading Test (Form C), (2) grade in the first clinical nursing course, (3) sex, (4) age, (5) ethnic background, and (6) prior educational experience.

The Spearman Rank Correlation was used to determine if there were statistically significant relationships between reading abilities and grades of students in the initial clinical nursing course. The Kruskal-Wallis one-way analysis of variance was used to determine if there were statistically significant differences in reading abilities between white female students below the age of 30 (traditional group) and men, black, Hispanics, those of other ethnic backgrounds, or students over the age of 30 (the nontraditional subgroups of the population). Kruskal-Wallis was also utilized to determine any statistically significant difference between students' grades in the initial clinical nursing course and the type of the students' prior educational experience (junior college, senior college or university, or a baccalaureate degree).

For the limited population of this study, data findings indicate that there is an inverse relationship between the students' reading ability and grades in their initial clinical course; that there are significant differences in the reading ability of the subgroups of black students, students from other ethnic backgrounds, and older students; and that there is no relationship between prior educational experience and students' grades in the initial clinical course. It is concluded, therefore, that reading ability cannot be identified as a factor that is related to success in the initial clinical nursing course, and that neither the ability of men students nor the ability of junior college transfer students to complete the program should be of concern to nursing school admissions officers and faculty.

Reference

Brown, J.I. Examiner's manual for the Nelson-Denny Reading Test. Boston: Houghton Mifflin Company, 1976.

PERCEIVED COMPETENCY BEHAVIORS FOR THE CLINICAL NURSE SPECIALIST ROLE

Mary Ellen Wyers, RN, EdD
Associate Dean and Associate Professor

Susan K. Grove, RN, PhD
Associate Professor
School of Nursing
The University of Texas at Arlington

Nancy L. Ackley, RN, MS
Director of Clinical Evaluation and Development
Methodist Hospitals of Dallas

During the past 10 years, perceptions of competency behaviors for the role of the clinical nurse specialist have differed among nurse administrators, graduate nurse educators, and clinical nurse specialists. This research study emerged from the discrepancies in role perceptions that potentially may have contributed to role ambiguity and conflict.

This descriptive study involved the exploration of the clinical nurse specialist role within professional nursing practice.

The following research questions were investigated: 1) What are the competency behaviors for the role of the clinical nurse specialist as perceived by the nurse administrators, graduate nurse educators, and clinical nurse specialists? 2) What are the areas of agreement and disagreement among the nurse administrators, graduate nurse educators, and clinical nurse specialists regarding competency behaviors for the clinical nurse specialist role? 3) What sub-roles comprise the clinical nurse specialist role?

The design involved the development of an instrument to determine the essential competency behaviors for the clinical nurse specialist role. In order to identify these behaviors, a pilot study was conducted resulting in an instrument of 40 essential behaviors.

Following the pilot, this study was conducted involving a national sample: 160 nurse administrators, 233 graduate nurse educators, and 110 clinical nurse specialists. The subjects of this sample completed the 40-item instrument by ranking the competency behaviors on a six-point scale from most essential to least essential; pertinent demographic data also were collected.

A frequency distribution identified the mean range for the behaviors to be 4.49 to 5.78. The behavior with the lowest mean dealt with the discharge process; the behavior with the highest mean dealt with role modeling. The greatest variance between behavioral means involved the graduate nurse educators and nurse administrators. The least variance between the behavioral means involved the nurse administrators and clinical nurse specialists. The mode for the 40 behaviors for each group was predominantly six, indicating a positive response to the behaviors by the nurse administrators, graduate nurse educators, and clinical nurse specialists. The means for the groups were: nurse administrators, 5.15; graduate nurse educators, 5.26; and clinical nurse specialists, 5.18. There was no significant difference between the group means. The factor analysis reduced the data to four factors within each of the three groups. In the factor analysis of the total sample (503 subjects), Factor 1 explained 63.9 percent of the variance; Factor 2, 15.7 percent variance; Factor 3, 10.9 percent variance; and Factor 4, 9.5 percent variance. In analyzing the behaviors that were clustered by the factor analysis the following sub-roles were predominant: practitioner, teacher, researcher, consultant. The degree of the factor variance explained by the sub-roles varied between the three groups.

The instrument reliability for the total sample was .910. Thus, the implications the study has for nursing are multiple: 1) the list of behaviors will assist the nurse administrators with effectively utilizing and evaluating the clinical nurse specialist; 2) the graduate nurse educators will be able to use the behaviors and role delineations for curriculum development for the clinical nurse specialist role; 3) the clinical nurse specialists will be able to clarify their role and be able to develop a job description for their role.